



Curtin University

Evidence on the nature and  
extent of alcohol promotion  
and the consequences for  
young people's alcohol  
consumption

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# Table of Contents

<b>1</b>	<b>Executive Summary .....</b>	<b>6</b>
<b>2</b>	<b>Glossary .....</b>	<b>9</b>
<b>3</b>	<b>Introduction .....</b>	<b>11</b>
3.1	<i>Alcohol consumption and harm .....</i>	12
3.2	<i>The state of play in alcohol promotion: a changing media environment .....</i>	14
3.3	<i>Current regulatory frameworks in Australia and worldwide.....</i>	17
3.3.1	Overview .....	17
3.3.2	Alcohol advertising regulations in Australia .....	18
3.4	<i>Overview of report .....</i>	20
3.4.1	Scope .....	20
3.4.2	Structure.....	21
<b>4</b>	<b>Methodological and measurement considerations.....</b>	<b>23</b>
4.1	<i>Overview.....</i>	23
4.2	<i>Quantitative and qualitative research.....</i>	23
4.3	<i>Considerations for quantitative study design.....</i>	24
4.4	<i>Quality assessment protocol.....</i>	27
4.4.1	Quality rating of individual studies .....	27
4.4.2	Quality rating of major findings.....	28
<b>5</b>	<b>Traditional Media .....</b>	<b>29</b>
5.1	<i>Introduction .....</i>	29
5.2	<i>Research context .....</i>	30
5.3	<i>Content of traditional forms of alcohol advertising .....</i>	30
5.3.1	Summary .....	35
5.4	<i>Youth exposure to alcohol advertising.....</i>	36
5.5	<i>Link between exposure and consumption.....</i>	36
5.5.1	Cross-sectional studies .....	37
5.5.2	Longitudinal studies .....	40
5.5.3	Experimental studies .....	41
5.5.4	Summary .....	42
5.6	<i>Implications for regulation.....</i>	43
5.7	<i>Chapter summary.....</i>	44

<b>6</b>	<b>Sports sponsorship and advertising during sports events .....</b>	<b>47</b>
6.1	<i>Introduction .....</i>	48
6.2	<i>Research context .....</i>	49
6.3	<i>Sponsorship strategies .....</i>	49
6.3.1	Summary .....	52
6.4	<i>Frequency and exposure .....</i>	53
6.4.1	Frequency of alcohol-references during sporting events.....	53
6.4.2	Youth exposure to alcohol advertising during televised sporting events .....	54
6.4.3	Summary .....	55
6.5	<i>Link between exposure to sponsorship and alcohol-related beliefs, intentions, and behaviours.....</i>	56
6.5.1	Summary .....	58
6.6	<i>Implications for policy .....</i>	58
6.7	<i>Chapter summary.....</i>	59
<b>7</b>	<b>Digital media .....</b>	<b>63</b>
7.1	<i>Introduction .....</i>	63
7.2	<i>Promotional strategies .....</i>	64
7.2.1	Websites .....	64
7.2.2	Apps.....	65
7.2.3	Social media .....	65
7.2.4	Summary .....	69
7.3	<i>Volume and exposure .....</i>	69
7.3.1	Access .....	71
7.3.2	Interactivity .....	72
7.3.3	Summary .....	73
7.4	<i>Link between exposure and consumption.....</i>	74
7.4.1	Summary .....	75
7.5	<i>Code violations .....</i>	76
7.6	<i>Implications for regulation.....</i>	76
7.7	<i>Chapter summary.....</i>	78
<b>8</b>	<b>Other types of promotion.....</b>	<b>80</b>
8.1	<i>Introduction .....</i>	80
8.2	<i>Alcohol-branded merchandise.....</i>	80
8.3	<i>Point-of-sale promotions.....</i>	82
8.4	<i>Corporate social responsibility .....</i>	83

<b>9</b>	<b>Discussion .....</b>	<b>87</b>
9.1	<i>Overview of findings and recommendations in the literature .....</i>	87
9.2	<i>Conclusion.....</i>	91
<b>10</b>	<b>References .....</b>	<b>92</b>

# 1 Executive Summary

Alcohol consumption is a leading contributor to the global burden of disease and death. Given the harms attributable to alcohol, there is a need to examine the factors that contribute to its consumption. One known influence is alcohol promotion. The alcohol industry is a multinational entity that devotes substantial resources to the promotion of alcohol. There is evidence to suggest that these efforts have become increasingly sophisticated and widespread in recent years. As well as traditional forms of media such as television and magazines, alcohol is promoted through less explicit means such as sports sponsorship and alcohol-branded merchandise. Alcohol is also increasingly promoted via newer forms of media, such as social media platforms. This report provides an overview of the nature, extent, and impact of alcohol promotion, with a specific focus on the influence of alcohol promotion on young people. Major findings are as follows:

- Studies show that young people are exposed to a large and growing amount of alcohol advertising on traditional media and have high levels of awareness of this advertising. Analyses of alcohol advertising via traditional media channels show a high rate of advertising code violation. These code violations occur disproportionately in media with high youth exposure. Internal marketing documents show that some alcohol marketers seek to include content in advertising that targets youth, promotes excessive consumption of alcohol, and links alcohol with social success, while attempting to stay within the letter of advertising codes.
- Sports sponsorship by the alcohol industry occurs at both the community and professional level. Sponsorship practices by alcohol companies mean there are numerous visual references to alcohol during televised sports events. Research suggests that alcohol promotion practices at live sporting events serve to normalise the association between sports and alcohol consumption.
- A loophole in current regulations allows alcohol advertising to be aired in children's popular television viewing times during sports programming. This means Australian children and adolescents are exposed to a substantial amount of alcohol advertising on television.

- The advent of digital media marks a new frontier in the promotion of alcohol. Research has documented an increasingly sophisticated range of techniques used in online alcohol promotion to integrate alcohol into the everyday lives of young people. These techniques include prompting interaction with alcohol-related content among users, co-opting the cultural practices of youth, using social media to leverage alcohol-sponsored events, and strategically timing posts to engage with users at popular drinking times. There are limited controls in place to prevent underage youth from accessing alcohol-related content on social networking sites, and as a result young people (both adolescents and young adults) are likely exposed to a high volume of alcohol-related promotional activities through digital media.
- Alcohol promotion has clear effects on young people's alcohol-related beliefs and behaviours. There is strong and consistent evidence showing that alcohol promotion through traditional media channels leads to earlier initiation of drinking and increased likelihood that those who already drink will drink more and in ways that put them at increased risk of harm.
- A growing body of research demonstrates the influence of alcohol-related sports sponsorship and alcohol promotion via digital media on alcohol-related beliefs and behaviours. Research suggests that alcohol sponsorship of sporting events leads to greater alcohol consumption and implicit brand familiarity and liking among young people. Alcohol sponsorship of athletes has been associated with higher likelihood of hazardous drinking in these athletes. A link has been found between active engagement with alcohol-related content on digital media (not passive exposure) and greater alcohol consumption. The need for more longitudinal research in these areas has been noted, but the trends mirror those found for the traditional advertising media that have been the focus of most previous research (i.e., television, radio, and print).
- Other forms of alcohol promotion also impact on youth intake levels. Point of sale promotions increase the amount of alcohol young people buy on a single occasion and ownership of alcohol-branded merchandise is a strong predictor of greater alcohol consumption among young people.

- Researchers are increasingly noting that corporate social responsibility practices by the alcohol industry can serve to protect commercial interests and divert attention from regulatory approaches known to effectively reduce alcohol consumption.
- Analysis of alcohol industry magazines shows that some alcohol marketers are engaging in novel and sophisticated above- and below-the-line promotional strategies designed to appeal to young people.
- Research consistently shows that industry-driven advertising codes in Australia and abroad are ineffective, as evidenced by a high number of violations of both the letter and spirit of those codes. Many authors argue that advertising codes should be independent of the alcohol and advertising industries and instead be government regulated. It has also been proposed that the scope of alcohol advertising codes should be expanded to relate to all forms of alcohol promotion and to include provisions about the volume and placement of promotion, not just the content. Alternatively, it has been suggested that codes could specify permitted forms of promotion rather than attempting to address all non-permitted promotional activities.



## 2 Glossary

<b>Above-the-line advertising</b>	A form of advertising that is broadcast through mass media and is characterised by explicit and evident advertising campaigns.
<b>Ad-spend</b>	The amount of money spent on advertising a product or activity, usually expressed per year.
<b>Advertising</b>	A media communication pertaining to a good or service that is designed to inform or influence the receiver.
<b>Below-the-line advertising</b>	Forms of advertising that employ subtle and often unconventional methods to advertise a product (e.g., sponsorship or branded merchandise).
<b>Confounding variable</b>	A factor that may influence the relationship between two variables.
<b>Convenience sample</b>	People included in a study who are conveniently available to the researcher.
<b>Co-regulation</b>	Where industry creates and administers its own regulatory arrangements with legislative support provided by government for the enforcement of the arrangements.
<b>Cross-sectional study</b>	A quantitative study design where all data are collected at one point in time.
<b>Dot-com websites</b>	Unidirectional websites that facilitate passive viewing of information, normally controlled by an administrator.
<b>Digital advertising</b>	Promotion that relies on electronic devices such as computers and smartphones to reach potential consumers.
<b>Experimental study</b>	Quantitative study design where participants are allocated to different treatment conditions and then the effects of these conditions on particular outcomes are compared.
<b>Longitudinal (cohort) study</b>	Quantitative study design where data are collected at two or more points in time to determine causality between variables.
<b>Marketing</b>	The action or business of developing, pricing, promoting, and selling goods or services.
<b>Point-of-sale promotions</b>	All efforts to increase sales of a given product that occur at the point of sale.

<b>Pourage rights</b>	A type of sponsorship agreement whereby a brand of alcohol is the only alcohol brand sold at an event.
<b>Print media</b>	Media in the form of print, such as newspapers and magazines.
<b>Promotion</b>	All activities that communicate messages about a product, brand, or service that are designed to generate sales and increase brand loyalty.
<b>Qualitative research methods</b>	A research approach that aims to study the meanings people attribute to social phenomena by using rich and detailed data gathered from interviews, focus groups, etc.
<b>Quantitative research methods</b>	A research approach that aims for objective measurement by collecting data in numerical form and using statistical analysis techniques.
<b>Representative sample</b>	A sample of research participants with characteristics representative of the broader population.
<b>Self-regulation</b>	A form of regulation whereby rules and codes of conduct are designed and enforced solely by industry.
<b>Social media</b>	Digital platforms that allow for the creating and sharing of digital content through online social networks (e.g., Facebook).
<b>Systematic review</b>	A type of review that systematically searches for, synthesises, and evaluates a number of primary research papers on a particular topic.
<b>Traditional media</b>	Types of mass media that originated before the creation of digital media, including television, print, and outdoor.
<b>Watershed (broadcasting)</b>	A point in time (usually 8/9pm) from which content only appropriate for adults can be broadcast.
<b>Web 2.0</b>	The second wave of the Internet that employs platforms enabling user-generated content and collaboration, rather than stable web-pages designed by an administrator.
<b>Young people</b>	An umbrella term typically referring to children, adolescents, and young adults. Due to the differing definitions given to each of these sub-categories of young people across studies, the specific age ranges included in any given study are specified throughout the report.

### 3 Introduction

Alcohol consumption is a ubiquitous and widely accepted part of Australian life. It is commonly consumed at social occasions, during recreational activities, and at cultural ceremonies (Lloyd, Matthews, Livingston, Jayasekara, & Smith, 2013; Roche et al., 2009). In 2014-2015, over 80% of the adult population in Australia reported consuming alcohol in the past year (Australian Bureau of Statistics, 2015). Drinking in large quantities is seen as a rite of passage to adulthood (Berends, Jones, & Andrews, 2016; Pettigrew, Biagioni, & Jongenelis, 2016), and this is reflected in the large increase in alcohol consumption with attainment of the legal age to purchase alcohol (Australian Institute of Health and Welfare, 2014). Furthermore, the production and consumption of alcohol are major contributors to the Australian economy (Richardson, 2012). However, alcohol is “no ordinary commodity” (Babor, 2010, p. 769), and a large body of evidence now demonstrates that alcohol consumption imposes a significant health and social burden on Australian society (Australian Institute of Health and Welfare, 2016).

Given the significant harms attributable to alcohol consumption, there has been growing debate on the extent to which it is appropriate for alcohol companies to promote their products to the public (Australian Medical Association, 2012; Australian National Preventive Health Agency, 2014; Babor, 2016; Casswell, 2012; de Bruijn, 2014; Gordon, 2011a). At the centre of this debate are concerns over the potential impact of promotional activities on young people, particularly the capacity for alcohol promotion to increase the amount of alcohol that young people consume (Australian Medical Association, 2012; Hastings & Sheron, 2011, 2013).

As with all complex social behaviours, there are many factors that contribute to alcohol consumption, such as personality traits and peer drinking patterns (Brooks-Russell, Simons-Morton, Haynie, Farhat, & Wang, 2014; Dick et al., 2013; Stautz & Cooper, 2013). While these are undoubtedly important contributors, there is now a robust body of evidence showing that alcohol promotion independently contributes to alcohol consumption, over and above other factors (Anderson, de Bruijn, Angus, Gordon, & Hastings, 2009; Jernigan, Noel, Landon, Thornton, & Lobstein, 2016; McClure, Stoolmiller, Tanski, Engels, & Sargent, 2013; L. Smith & Foxcroft, 2009). The focus of the current report is on the nature, extent, and

influence of promotional activities carried out by the alcohol industry. Specifically, this report reviews the evidence relating to the tactics employed by alcohol marketers, the frequency and volume of these activities, and the extent to which they influence alcohol-related beliefs and behaviours. Reflecting their greater vulnerability, the report has a specific focus on the extent to which these promotional practices reach and influence young people. Attention is also given to the effectiveness of regulatory approaches applied to alcohol promotion in Australia and around the world.

This introductory chapter provides an overview of alcohol consumption patterns and associated harm, the current state of alcohol promotion, and relevant regulations that apply to alcohol promotion in Australia and globally. The chapter concludes with an overview of the structure and scope of the literature review.

### 3.1 Alcohol consumption and harm

There are multiple well-documented short- and long-term risks associated with alcohol consumption. The most recent World Health Organization report on alcohol and health indicated that alcohol consumption accounted for approximately 6% of all deaths and 139 million disability-adjusted life years worldwide in 2012, making it a leading contributor to the global burden of death and disease (World Health Organization, 2014). Alcohol consumption is understood to contribute to more than 200 acute and chronic health problems, most commonly alcohol dependence, liver cirrhosis, cancers, and injuries (World Health Organization, 2014). Each day in Australia, alcohol leads to the death of approximately 15 people and the hospitalisation of 430, accruing to 5,554 deaths and 157,132 hospitalisations per year (Gao, Ogeil, & Lloyd, 2014).

In 2009, the National Health and Medical Research Council (NHMRC) reviewed the evidence relating to the harms resulting from alcohol consumption and consequently revised the national drinking guidelines to assist Australians to minimise their alcohol-related risk (NHMRC, 2009). The NHMRC report distinguished between two different types of risk that derive from distinct drinking volumes and patterns: (1) the cumulative lifetime risk of alcohol-related injury or disease associated with long-term drinking, leading to conditions such as liver cirrhosis and cancer and (2) the immediate increase in risk of injury from excessive drinking on a single occasion resulting from occurrences such as alcohol poisoning,

violence, and traffic accidents. The guidelines relating to these two types of risk are as follows (NHMRC, 2009, pp. 2-3):

- (1) For healthy men and women, drinking no more than two standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease or injury.
- (2) For healthy men and women, drinking no more than four standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion.

The most recent available data on alcohol consumption patterns among Australians show that during 2014-2015 a significant proportion of the Australian population aged 18 years and over drank at levels that exceeded the two NHMRC guidelines noted above (Australian Bureau of Statistics, 2015). Seventeen percent of Australians consumed more than an average of two standard drinks per day, with men more likely to exceed this long-term risk guideline than women (26% of men vs 9% of women). Furthermore, 44% of Australians exceeded the short-term risk guideline by consuming more than four standard drinks on a single occasion at least once in the past year, with this drinking pattern also being especially prevalent among men (57% vs 32% of women) (Australian Bureau of Statistics, 2015). While these data show that men are more likely than women to drink at risky levels, long-term trends demonstrate that the amount of alcohol consumed by women has increased over time (Slade et al., 2016). This is particularly troubling given research indicating that, all else being equal, women are more susceptible to some of the cumulative long-term harms associated with drinking, such as cancers, gastrointestinal diseases, and cardiovascular diseases (World Health Organization, 2014). Young adults (age 18-24 years) are another group of particular concern given that they exceed the single occasion risk guideline at a higher rate than all other age-groups. In 2014-2015, 69% of young adult males and 60% of young adult females consumed more than four standard drinks on a single occasion at least once in the past year (Australian Bureau of Statistics, 2015).

Underage alcohol consumption also presents a considerable public health challenge. Among adolescents and children, alcohol use is associated with a range of physical, psychological, and social harms (Hingson & White, 2014). For example, alcohol consumption can contribute to depression, suicide, interpersonal violence, academic problems, risky sexual behaviour, and reckless driving (Jefferis, Power, & Manor, 2005). Furthermore, early initiation of

alcohol use has adverse effects on brain development and mental health and predicts a higher likelihood of harmful patterns of drinking in later adulthood (Hingson, Heeren, & Winter, 2006; Liang & Chikritzhs, 2012). As such, the 2009 NHMRC guidelines state that for people under the age of 18, not consuming alcohol is the safest option (NHMRC, 2009). However, in 2014 approximately 70% of Australian students between the ages of 12 and 17 years had tried alcohol at least once, with 44% reporting that they had consumed alcohol in the past year, 24% in the past month, and 14% in the past week (Government of Western Australia, 2014). Of those students who had consumed alcohol in the past week, one-third did so at levels associated with heightened risk of single occasion harm. However, longer-term trends are favourable, with the number of young people abstaining from alcohol increasing from 10% in 1999 to 32% in 2014 (Government of Western Australia, 2014).

### 3.2 The state of play in alcohol promotion: a changing media environment

Alcohol is one of the most heavily promoted products in the world (Jernigan, 2009). Increasingly, a small number of large, multinational companies are dominating the alcohol market. For example, a recent merger of the world's two largest beer companies - AB InBev and SABMiller – has led to one-third of the total amount of beer sold worldwide being produced by this joint company (Collin, Hill, & Smith, 2015). Mergers such as this mean that alcohol companies have enormous resources at their disposal to devote to promoting their products. This is reflected in alcohol promotion becoming increasingly sophisticated, multi-faceted, and widespread, posing ever-greater challenges for regulators.

To frame the following discussion of alcohol promotion trends, the various terms used to denote relevant activity are defined in this report as follows. Marketing in its broadest sense can be defined as “the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large” (Gundlach & Wilkie, 2009, p. 260). Marketing encompasses a number of activities, often referred to as the ‘marketing mix’ (Borden, 1964). One dominant framework identifies the “four P’s” of marketing, which are product, price, placement, and promotion (McCarthy, 1960; Yudelsohn, 1999). Marketers aim to design each of these facets to maximise sales, which often involves targeting each of the marketing mix elements to specific groups

within the population, a practice known as ‘market segmentation’. For example, the product itself, which includes product design, branding, and packaging, can be developed to appeal to a given target market (i.e., men vs women or younger people vs older people). Price, which refers to the amount a customer pays for a product, is key to attracting specific target markets and can include price promotion incentives such as discounts. Place refers to where the product is distributed, the availability of the product, and retail placement strategies such as front-of-store positioning. Finally, promotion encompasses communication activities that are designed to inform customers about the product, build brand loyalty, and stimulate purchase intentions. These communications can occur across a range of different media channels and involve considerations of frequency, timing, and persuasive content to reach a given target audience (McCarthy, 1960; Tellis, 2006). Alcohol promotion as a specific form of alcohol marketing is the primary focus of this report.

In the past, alcohol promotion was predominantly carried out through mass media channels such as television, print, and radio (White et al., 2015). Promotional activities through these channels are often referred to as being ‘above the line’ because they typically employ explicit advertising campaigns and are broadcast to a mass audience. More recently, alcohol companies have been promoting their products using a much broader range of platforms and methods, many of which are classified as ‘below the line’ promotional activities. These involve less explicit and recognisable forms of promotion and include sponsorships, alcohol-branded merchandise, smartphone applications (apps), online competitions, and social media pages (Australian Medical Association, 2012; Hastings & Sheron, 2013). The evolution of new media in recent years has fundamentally changed the landscape of alcohol promotion by introducing platforms that are increasingly interactive, targeted, mobile, and adaptable in real-time (Carah, 2014; Purves, Stead, & Eadie, 2014).

Publicly available data on the prevalence of alcohol promotion in Australia and elsewhere are difficult to obtain. However, the limited data available give some indication of current trends. White and colleagues (2015) tracked advertising expenditure (‘ad-spend’) in Australia across traditional channels from 1997 to 2011 and online from 2008 to 2011. Their results showed that total alcohol advertising expenditure peaked in 2007 and then declined until 2011. However, the authors noted that there were no data available on the amount spent on below-the-line advertising activities such as sponsorship, so funds being diverted to these areas may account for the observed decline in ad-spend. The overall decline is also likely to be partly

explained by an increasing investment in advertising via digital media, which is a cheaper advertising medium than more traditional channels (Jernigan & Rushman, 2014). There were also some notable shifts in expenditure for various traditional advertising channels. In 1997, television accounted for the largest share of ad-spend (50%), decreasing substantially by the end of the 14-year period (19%). By comparison, the proportion of advertising dollars spent on outdoor advertising and newspapers increased, with newspapers accounting for the highest proportion of ad-spend in 2011 (40% - up from 28%). Notably, alcohol retailer promotion budgets significantly increased over time, which is likely due to the two leading supermarket chains in Australia (Coles and Woolworths) increasing their share of the off-licence alcohol market since the late 1990s (White et al., 2015).

More recently, a news report based on Standard Media Index figures indicated that above-the-line alcohol advertising expenditure in Australia dropped 16% from \$130.4 million in 2011 to \$109.5 million in 2015 (Bennet, 2016). However, despite the overall decline, the amount spent on outdoor advertising increased (e.g., a 29% increase from the first half of 2015 to the first half of 2016). There is also indirect evidence that expenditure on digital advertising is growing rapidly. The number of bookings at digital media agencies by alcohol companies increased by 69% between the first half of 2015 and the first half of 2016 (Bennet, 2016).

Overall, a significant amount of money is spent each year on alcohol promotion. While it appears that there has been a decline in above-the-line promotion in recent years, this may reflect a shift away from traditional methods of advertising to newer channels that are not captured by ad-spend data. In addition, even if ad-spend data were available for all types of media, the cost effectiveness of newer media channels means that they are difficult to compare with traditional media channels. It is increasingly recognised that a relatively low spend on digital media does not necessarily mean low impact or exposure because of the potential for content to be freely disseminated through social networks by users (Jernigan & Rushman, 2014).



## 3.3 Current regulatory frameworks in Australia and worldwide

### 3.3.1 Overview

There are three types of regulation that can apply to alcohol promotion (Australian Government, 2013):

- (1) Self-regulation, whereby the alcohol and advertising industries formulate the rules and codes of conduct for advertising and are responsible for the enforcement of these rules;
- (2) Co-regulation, whereby the alcohol/advertising industries devise and manage their own guidelines, but some or all of the guidelines are enforced by government; and
- (3) Government-mandated regulation, whereby the rules are enforced by legislation.

Self-regulatory and co-regulatory approaches have been repeatedly demonstrated to have significant limitations that are discussed in depth throughout this report. However, despite these limitations, many Western nations rely on either self-regulation or co-regulation of both the placement and content of alcohol promotion (Australian National Preventive Health Agency, 2014; Noel & Babor, 2016). Placement guidelines sometimes specify that alcohol advertising should not be permitted on media where the proportion of exposed underage individuals is higher than a given percentage of the total audience (typically 15-30%) (Noel, Babor, & Robaina, 2016). However, placement guidelines are often piecemeal or very limited. More commonly, regulations focus on the content of advertising, especially in terms of content that: (i) has obvious or evident appeal to youth, (ii) links alcohol with social success, (iii) is presented in combination with risky activities (such as driving motor vehicles), or (iv) encourages excessive or irresponsible consumption of alcohol (Noel, Babor, & Robaina, 2016).

Some European governments have imposed legislated regulation on the content and placement of alcohol advertising. For example, television advertising for spirits is banned in Austria, Belgium, Finland, France, Germany, and Ireland (Nelson, 2010). An example of more restrictive advertising legislation is France's 'Loi Évin'. This legislation imposes a complete ban on alcohol-related sponsorship and advertisements on television and in

cinemas. Alcohol advertising is allowed on some radio (prohibited between 5pm and midnight), on billboards, in print media for adults, and at certain events such as wine fairs. The law is designed such that alcohol advertisements can only contain information about factual features of the product, such as its alcohol content or place of production, and a health warning must be included. The Loi Évin includes substantial financial sanctions for breaches of the law (Gallopel-Morvan, Spilka, Mutatayi, Rigaud, & Lecas, 2016).

Many Western nations, including the US and the UK, have alcohol advertising codes that are similar to those operating in Australia, which are outlined below (Australian National Preventive Health Agency, 2014). Because of this, studies into the effectiveness of regulatory approaches from these countries cited throughout this review often provide data that are relevant to the Australian context. However, countries where alcohol advertising is more regulated (e.g., France) serve as a useful point of comparison to Australia and hence are also referred to where relevant.

### 3.3.2 Alcohol advertising regulations in Australia

This section of the report outlines some of the major alcohol advertising regulations in Australia, with a specific focus on the regulations that are most relevant to the current literature review. For a more comprehensive summary of the regulations that apply to alcohol advertising in Australia, see the Australian National Preventive Health Agency's report *Alcohol Advertising: The Effectiveness of Current Regulatory Codes in Addressing Community Concern* (Australian National Preventive Health Agency, 2014).

Alcohol advertising *content* in Australia is primarily regulated by the alcohol-industry funded and operated Alcohol Beverages Advertising Code (ABAC) Scheme. Participation by alcohol companies is voluntary. As of 2015, the operators of the ABAC Scheme were all industry representatives, and the management committee consisted of several industry members and one government representative. The Scheme uses a complaints-based system to assess whether advertisements are in violation of the Code. Complaints are submitted by members of the public and then reviewed by an adjudication panel against the Code. Members of the adjudication panel cannot be current or recent employees of the alcohol industry, and the panel includes someone with a public health background. The only sanctions are request for

withdrawal of the advertisements from circulation or modification of the problematic advertisement. The ABAC Scheme offers an optional pre-vetting service for member organisations (<http://www.abac.org.au>). A limitation of the ABAC is that it does not cover promotional activities associated with sponsorship.

According to the ABAC, alcohol advertising must not:

- Encourage excessive alcohol consumption or abuse of alcohol or irresponsible or offensive behaviour associated with alcohol use;
- Encourage consumption that is in excess of the NHMRC Australian Guidelines;
- Challenge or dare people to consume alcohol;
- Promote a beverage on the basis of its strength or intoxicating effect;
- Have a strong or evident appeal to minors or depict a person who is a minor or an adult under 25 years of age;
- Suggest that the consumption of alcohol can contribute to a change in mood or environment, or that the consumption of alcohol can contribute to personal, business, social, sporting, sexual, or other success; and
- Depict alcohol consumption before or during an activity that requires a high degree of attention such as the operation of machinery or vehicles.

There are several alcohol advertising regulations relating to the *placement* of alcohol advertising that are relevant to this report. The Australian Communications and Media Authority (ACMA), a government body, has responsibility for the Children's Television Standards (CTS) that prohibit alcohol advertising on television during children's popular viewing times. Alcohol advertising on television is limited to weekends and public holidays between 8:30pm and 5:00am and on weekdays from midday to 3:00pm and 8:30pm to 5:00am. However, there is a major loophole in this rule as set out in the Commercial Television Industry Code of Practice (CTICP), which sits alongside the CTS. Currently, alcohol advertising is allowed during sports programming at any time of the day if shown on weekends or public holidays (Australian Communications and Media Authority, 2009). This code of practice is considered co-regulatory because it was developed by an industry body but then registered with the ACMA. It should also be noted that the above regulations only refer to commercial free-to-air television. The codes governing subscription television do not restrict the placement of alcohol advertising (Australian Subscription Television and Radio

Association, 2013). Finally, the Outdoor Media Association, an industry body, administers a self-regulatory guideline relevant to the placement of alcohol advertising that recommends that fixed outdoor alcohol advertisements should not appear within a 150m sightline of a school gate.

Given the documented ineffectiveness of existing alcohol advertising regulations in Australia, and the ABAC Scheme in particular (Australian Medical Association, 2012; Australian National Preventive Health Agency, 2014), in 2012 a group of independent professionals created an alternative organisation called the Alcohol Advertising Review Board (AARB: <http://www.alcoholadreview.com.au>). The AARB seeks to draw attention to the need for effective regulation of alcohol promotion in Australia. It addresses some of the identified shortcomings of the ABAC by including provisions that cover the content and placement of all forms of alcohol promotion (Pettigrew, Johnson, & Daube, 2013). The AARB code defines 'young people' as those under the age of 25 years, consistent with the evidence of the impact of alcohol on the developing brain and the recommendation of the National Preventative Health Taskforce to "phase out alcohol promotions from times and placements that have high exposure to young people aged up to 25 years" (National Preventative Health Taskforce, 2009, p. 251). The AARB code is applied by a complaint review panel of diverse professionals who are independent of the alcohol industry and have an understanding of public health (AARB website: [www.alcoholadreview.com/about](http://www.alcoholadreview.com/about)).

## 3.4 Overview of report

### 3.4.1 Scope

This report draws primarily on peer-reviewed empirical papers relating to alcohol promotion. The search period was limited to January 2011 to October 2016, although relevant seminal papers prior to 2011 are drawn upon on occasion to provide context for more recent findings. Government and NGO position papers were used to identify relevant empirical papers and inform thinking, especially around regulatory issues. Literature reviews and meta-analyses were included when they provided a useful summary of the literature. Occasionally, peer-reviewed opinion or commentary pieces were included to provide perspectives on various aspects of the extant research or regulation.

An initial examination of the literature found that the majority of studies conducted over the nominated period pertain to children (below 12 years of age), adolescents (12-17 years), or young adults (18-30 years). Throughout the literature there is variability in the definition of adolescents and young adults, complicating direct comparisons of study outcomes. The sample for each of the reviewed studies is therefore clearly noted in this report to overcome this definitional ambiguity. In some instances there is no relevant human sample, such as in studies that involve content analyses of alcohol advertisements.

A range of electronic databases was searched including Pubmed, PsycInfo, Medline, and Google Scholar to access relevant studies. The following key words were used to identify relevant literature: alcohol OR drinking, and marketing OR promotion OR sponsorship OR advertising. The reference sections of key review papers were also inspected to identify any relevant papers not returned by the above search. Furthermore, eminent scholars in the alcohol marketing field were consulted to request advance copies of works in press.

### 3.4.2 Structure

The next chapter (Chapter 4) presents an overview of important methodological considerations relevant to the empirical studies reported in the following chapters. The first of the review chapters (Chapter 5) focuses on traditional media, which is where much research effort has been devoted historically. Chapter 6 reviews studies pertaining to sports sponsorship and Chapter 7 examines the numerous studies on alcohol promotion via digital media that have been published since 2011. Chapter 8 reviews other methods of promotion that do not fall under the previous categories (e.g., merchandising, point-of-sale promotions, and corporate social responsibility). The report concludes with an overview of the major research findings and a summary of the most common policy recommendations made in the literature (Chapter 9).

The report is structured such that within each review chapter, four major questions are addressed:

- 1) What are alcohol marketers doing?
- 2) How much of it are they doing?
- 3) What are the apparent impacts of these activities?
- 4) What are the implications for effective regulation?

Thus, for each review chapter, all papers relating to the strategies employed by alcohol marketers are reviewed first. Next, research relating to the frequency and volume of alcohol promotion and resulting advertising exposure is reviewed, followed by a review of studies pertaining to the link between exposure to promotion and alcohol-related beliefs and behaviours. Conclusion sections in each chapter provide a summary of policy recommendations identified in the literature.

## 4 Methodological and measurement considerations

### 4.1 Overview

This chapter provides a summary of the methodological and measurement issues that should be taken into account while reading this report. First, the primary differences between qualitative and quantitative research are summarised. The next section focuses on some of the major considerations relevant to quantitative research in recognition of this methodological approach accounting for the majority of studies on the effects of alcohol promotion to date and the tendency for quantitative studies to be the source of most debate between the alcohol industry and public health researchers. Finally, the methodology of a systematic quality assessment applied in this report is described.

### 4.2 Quantitative and qualitative research

There are two major research approaches employed in the social sciences. These are referred to as quantitative research and qualitative research. These approaches have distinct methodologies and theoretical assumptions. It is important to keep in mind the strengths and weaknesses of these approaches when reviewing the existing literature on alcohol promotion.

Quantitative research involves the systematic collection of data in numerical form and the analysis of data via statistical techniques. This approach is underpinned by the assumption of 'realism' - that there is a knowable truth that can be uncovered (Teddlie & Tashakkori, 2009; Yilmaz, 2013). The goal of quantitative research is to reduce bias such that the research findings can be generalised from a sample of people to a broader population. This is achieved by using valid and reliable measurement tools, attempting to control for (hold equal) the effect of variables that may also influence the variable of interest (confounds), and using samples that are representative of the population of interest. Quantitative researchers strive to be neutral during the research process (Teddlie & Tashakkori, 2009; Yilmaz, 2013).

By comparison, qualitative research sets out to examine how social experiences are formed and given meaning. Common qualitative methods include case studies, life stories,

interviews, focus groups, and observations (J. Ritchie, Lewis, Nicholls, & Ormston, 2013). Qualitative research is based on a view of knowledge as something that is dynamic and socially constructed. Therefore, the data of interest tend to be the meaning people attribute to social phenomena or the implicit meanings in cultural texts, which may differ depending on the context (J. Ritchie et al., 2013). That is, an idea may be widely accepted in one setting, but may not reflect a reality in another setting, yet both interpretations are viewed as equally valid and useful. Qualitative research tends to acknowledge the unavoidable influence of the researcher in the research process, rather than striving for objective observation (J. Ritchie et al., 2013; Yilmaz, 2013).

Studies using these two different approaches can be difficult to compare because they employ distinct methodologies and are based on competing assumptions about the nature of knowledge. While many argue that quantitative research is a stronger form of evidence because it can be generalised to the broader population, critics of this form of research contend that it fails to capture a nuanced understanding of individuals' personal and lived experiences (J. Ritchie et al., 2013; Yilmaz, 2013). Others see qualitative and quantitative research as complementary approaches that answer distinct research questions (Borland, 2001; Teddlie & Tashakkori, 2009). For example, in alcohol research qualitative studies are frequently used to understand the strategies employed by alcohol marketers to promote their products (Lobstein, Landon, Thornton, & Jernigan, 2016). This approach is useful because researchers are able to apply a critical lens to examine the subtext of what is being communicated in promotional messages and gain an in-depth understanding of people's perceptions of these messages. By comparison, quantitative research allows for the statistical examination of relationships between variables, and can provide concise and parsimonious summaries of patterns of behaviour. As such, quantitative studies have been used to determine whether there is a relationship between exposure to alcohol promotion and alcohol consumption behaviours (Jernigan et al., 2016).

### 4.3 Considerations for quantitative study design

This section provides a summary of some of the major methodologies and measurement approaches employed in quantitative studies that investigate the link between exposure to alcohol promotion and drinking behaviours.



The alcohol industry has argued that there is no evidence to suggest a link between alcohol promotion and increased alcohol consumption (e.g., Diageo Australia, 2012; for a discussion see Savell, Fooks, & Gilmore, 2016). This claim tends to be based solely on results from **econometric studies** that measure the total amount spent on alcohol promotion in a given population and the rate of alcohol consumption within that same population (Gallet, 2007; Hastings, Anderson, Cooke, & Gordon, 2005; Saffer & Dave, 2006). Such studies usually find a very small or no link between advertising expenditure and population-level consumption (Gallet, 2007; Hastings et al., 2005; Saffer & Dave, 2006). However, this approach has some major methodological limitations. First, the expenditure data often exclude below-the-line advertising, thereby significantly underestimating the extent of such promotional activities. Second, analyses employing advertising expenditure data are based on the assumption that the amount spent on advertising is directly related to the degree of influence. However, this is not necessarily the case (Australian Medical Association, 2012). Finally, the comparisons between ad-spend and consumption are done at the aggregate level and can therefore mask the effects of advertising on specific sub-groups such as young people (Australian Medical Association, 2012).

Given the limitations of econometric studies, many public health researchers employ **consumer studies** that investigate the link between individuals' exposure to promotion and their alcohol consumption. Three primary research designs are employed that provide varying degrees of certainty about this relationship. **Cross-sectional studies** take a snapshot of levels of advertising exposure and alcohol consumption at one point in time (Anderson et al., 2009; L. Smith & Foxcroft, 2009). While these studies are useful to ascertain whether there is a correlation between advertising and alcohol consumption, they cannot establish causality (Anderson et al., 2009). **Longitudinal studies** capture data at two or more points in time and then examine the association between initial exposure to alcohol advertising and later alcohol consumption. This methodology allows researchers to assess advertising exposure prior to alcohol consumption and determine the direction of any observed correlation between advertising and alcohol consumption (i.e., whether those who are exposed to more alcohol advertising consume more alcohol). As such, longitudinal studies are currently considered the gold standard of evidence in this research area (Australian Medical Association, 2012; L. Smith & Foxcroft, 2009).

**Experimental studies** also allow researchers to infer causality. In alcohol advertising studies using this approach, participants are typically randomly allocated to view or not view alcohol advertising, and then measures of subsequent drinking behaviour are taken. Experimental studies have certain strengths. First, because participants are randomly allocated to conditions, the potential for confounding effects is minimised. Second, it is possible to gain an objective measure of consumption by assessing the amount of alcohol consumed in one sitting. However, there are also some limitations to this approach. Because experimental studies use highly controlled environments, they can lack real world validity due to their inability to capture the dynamic and cumulative nature of the advertising environment to which people are exposed on a daily basis (Stautz, Brown, King, Shemilt, & Marteau, 2016). Furthermore, because ethical considerations often discourage researchers from exposing youth to alcohol advertising, experimental studies most often include those above the legal alcohol-purchase age.

Jernigan et al. (2016) reviewed different ways of measuring exposure to alcohol advertising. They found the most common approach to be simple self-report (i.e., “How often do you view alcohol advertising and through which channels?”). Limitations of this approach were described as including (i) underestimation of exposure by failing to account for promotional activities that are processed below the level of awareness and (ii) biases resulting from those who are more interested in alcohol potentially paying more attention to alcohol advertising and therefore reporting a greater exposure (Jernigan et al., 2016). A more objective measure is to obtain self-reported exposure to specific media content, such as television shows, and then calculate the number and type of alcohol advertisements displayed throughout the given media to gain an estimation of exposure. Another more indirect way of measuring exposure is to examine receptivity to or recall of alcohol advertising. This method includes measures such as assessing whether participants are able to recognise specific alcohol advertising content or exhibit allegiance to a favourite brand (Jernigan et al., 2016).

There are also several different ways of measuring alcohol-related beliefs and behaviour. The weakest measures are thought to be alcohol-related attitudes, beliefs, or behavioural intentions, whereas reports of past alcohol consumption tend to be viewed as a stronger measure of behaviour (Bloomfield, Hope, & Kraus, 2013; Jernigan et al., 2016). However, even when using these stronger measures, self-report is still subject to the limitations of recall

bias and socially-desirable responding (i.e., participants may report the level of alcohol consumption they perceive to be socially acceptable) (Davis, Thake, & Vilhena, 2010).

In sum, numerous methodologies and measurement approaches are employed in the current literature, each with distinct strengths and weakness. However, as is the case when conducting any scientific research, there is no perfect method and the studies reported here have used a range of conventional methods, many of which are considered to be high quality. The following research summaries should be reviewed with these strengths and limitations in mind.

## 4.4 Quality assessment protocol

A systematic quality assessment was conducted to evaluate the quality of each of the studies included in this review and the overall quality of the evidence-base for each major finding. This information is summarised in a table at the end of each chapter. Below is an overview of the quality assessment protocol applied to both the individual studies and the primary findings identified in the literature.

### 4.4.1 Quality rating of individual studies

Each study was reviewed according to criteria that were relevant to the specific study design. To achieve this, the studies were classed into one of the following categories:

- (i) **Content:** studies that systematically examine the content of alcohol promotion activities.
- (ii) **Exposure:** studies that systematically examine the extent of exposure to alcohol promotion activities.
- (iii) **Audit:** studies that count the number of instances of a given variable of interest (such as the number of alcohol advertisements or Facebook pages).
- (iv) **Review:** studies that review previous research (including critical, systematic, and narrative reviews).
- (v) **Quantitative:** studies employing quantitative methods that do not fall into the above categories.

- (vi) **Qualitative:** studies employing qualitative methods that do not fall into the above categories.

Each study was scored on a scale from one to three for each criterion relevant to the methodology employed. A total quality score out of a possible three points was then computed by averaging the criteria ratings. For the quantitative studies, a double weighting was given for the criterion relating to whether the study could infer causality. This is a particularly important quality marker for this type of study design.

#### 4.4.2 Quality rating of major findings

The quality assessment process for the major findings identified across studies involved evaluating the following elements:

- (i) **Strength of the body of evidence:** This was computed by averaging the quality rating assigned to each individual paper.
- (ii) **Size of the body of evidence:** This typically refers to the size of the body of evidence in the five year period ranging from 2011-2016, although important review papers published outside of this period were also included in these analyses where relevant. Size was categorised as small (one to five studies), medium (six to ten studies), and large (more than 10 studies).
- (iii) **Sample composition, assessed according to:**
  - a. Number of countries – categorised as one (tested in one country), some (two to five countries), and many (six or more countries).
  - b. Study conducted (or not) in Australia
  - c. Age range included in the sample
- (iv) **Consistency:** The consensus between studies was classed as consistent (a range of studies showed identical or similar results), inconsistent (the results of one or more study/studies were in direct conflict with the findings of another study/studies conducted in a similar context under similar conditions), or mixed (studies based on a range of different designs or methods, applied in a number of different contexts, produced results that contrasted with those of one or more other studies).

## 5 Traditional Media

### Summary of major findings:

- Alcohol advertising via traditional media commonly violates both the spirit and the letter of advertising codes.
- Alcohol advertisements that violate industry codes are disproportionately concentrated in media with high youth exposure.
- Youth exposure to alcohol advertising on traditional media has increased over time.
- Exposure to alcohol advertising through traditional forms of media leads to earlier initiation of alcohol consumption and greater likelihood of harmful alcohol consumption among young people.
- Common regulatory recommendations include ensuring that advertising codes are unambiguous, incorporate meaningful sanctions for code violations, and cover not only the content but also the volume and placement of alcohol advertising.

### 5.1 Introduction

There are many different ways that alcohol marketers promote the purchase and use of their products. Traditionally, alcohol has been promoted through a mix of television, print, outdoor, and radio advertisements (Jernigan, 2009; White et al., 2015). Alcohol promotion through these traditional media channels tends to be the most noticeable and overt form of promotion, typically employing discrete and identifiable advertising campaigns (Australian Medical Association, 2012). Although the amount spent by alcohol marketers on traditional media channels has declined in recent years (White et al., 2015), it still accounts for a significant proportion of total promotion budgets and traditional channels remain a dominant form of alcohol advertising exposure among youth (Faulkner, Azar, & White, 2016). This chapter reviews evidence pertaining to the extent to which youth are exposed to alcohol advertising on traditional channels and examines alcohol marketers' promotional activities via these channels, with a particular focus on whether the advertising violates Australian and international advertising codes. The final area of investigation is whether exposure to alcohol

advertising via traditional forms of media leads to greater and more problematic alcohol consumption among youth.

## 5.2 Research context

Most of the research to date examining the nature, extent, and impact of alcohol promotion has focused on traditional media channels, reflecting the longer presence of these forms of media. Because of this, studies conducted since 2011 represent only a small proportion of the relevant research in each of these areas. Therefore, in each section below, relevant seminal papers and systematic reviews of evidence prior to 2011 are also included to more accurately represent the evidence base.

## 5.3 Content of traditional forms of alcohol advertising

There is a considerable amount of work examining the content of alcohol advertising. A recent systematic review documented peer-reviewed and non-peer reviewed studies that have examined the content of alcohol advertising (Noel, Babor, & Robaina, 2016). This review found that two major methodologies have been typically employed in these studies: (i) evaluating advertisements against a given advertising code to determine the rate of code violation and (ii) thematic analysis of alcohol advertisements. Of the 19 studies that assessed the content of alcohol promotion against an advertising code, 15 studies concluded that self-regulation of advertising was not effective. The most common violations of guidelines related to content with appeal to youth and content associating alcohol with social or sexual success. The review also found that the thematic elements in advertising were relatively consistent over time, especially those relating to physical success, health, humour, relaxation, and the depiction of young, attractive celebrities. A more recent development identified was the use of cartoons, particularly in television advertisements. This was noted to be particularly concerning given the clear appeal to children of this form of advertising (Noel et al., 2016).

Noel et al.'s review profiles a strong and consistent body of evidence demonstrating that alcohol advertising contains a significant amount of content that violates advertising guidelines and includes thematic content that is appealing to children and adolescents. Below, the individual studies included in Noel et al.'s historical review that were published since

2011 are individually described to gain deeper insight into the most recent developments in this area.

Seven recent studies were identified that examined the content of advertisements disseminated via traditional forms of media. Most of these studies used content analysis to identify dominant themes in alcohol advertising and to determine whether these themes were in violation of the alcohol advertising codes for the given country (Morgenstern et al., 2015; Pettigrew et al., 2012; Rhoades & Jernigan, 2013; Searle, Alston, & French, 2014; Siegel, DeJong, et al., 2016; K. C. Smith, Cukier, & Jernigan, 2014; Vendrame et al., 2015). Two of these studies also assessed the extent to which young people were likely to have been exposed to the advertising (Pettigrew et al., 2012; Rhoades & Jernigan, 2013). An additional study was identified that undertook a thematic analysis of alcohol companies' internal marketing documents (Hastings et al., 2010b). These studies are described below according to the type of media examined.

In terms of television advertising, two relevant studies were identified. In Pettigrew and colleagues' (2012) study, advertising data for a two-month period from all major Australian cities was accessed and coded according to the product that was being promoted, the time slot that the advertisement was placed in, and the themes that were employed. Around half of the 2,810 alcohol advertisements documented in the larger data set appeared during children's popular viewing times, even though these times accounted for only 39% of all possible viewing hours. Major themes identified were humour, mateship/friendship, and value for money. The authors argued that such themes may socialise young people to view alcohol as inherently linked to fun and friendship. Furthermore, it was noted that the advertisements emphasising value for money may suggest that alcohol is a commodity that should be purchased in bulk, which could be interpreted as contravening the spirit of the Australian ABAC code that stipulates that excessive consumption of alcohol should not be encouraged.

Similarly, Morgenstern and colleagues (2015) classified the content of all television alcohol advertising in the US for the top 20 beer and spirit brands over a two year period (2009-2011). Alcohol advertisements were classified according to content, airing time, and channel placement. A major aim of the study was to systematically assess the prevalence of the relatively new theme in alcohol advertising of 'partying', which had been tentatively uncovered in a past content analysis of alcohol advertising (Daykin et al., 2009). Morgenstern

et al.'s (2015) analyses revealed five content themes of 'partying', 'quality', 'sports', 'manly', and 'relax'. Partying was the dominant theme, accounting for 42% of all advertising, and was most likely to be employed in advertisements promoting alcopops, flavoured spirits, and liqueur, all of which are drinks that are commonly consumed by young people, and young women in particular (Huckle, Sweetsur, Moyes, & Casswell, 2008). This study is an important development because it is the first to systematically demonstrate the high frequency use of a party theme, which the authors note is likely to be especially attractive to adolescents and young adults (Morgenstern et al., 2015).

Two studies examined the content of alcohol advertising in magazines (Rhoades & Jernigan, 2013; K. C. Smith et al., 2014). Rhoades and Jernigan (2013) conducted a content analysis of alcohol advertising in 11 youth-oriented magazines over a five-year period (2003-2007) in the US. They coded the content for depiction of injury, overconsumption, addiction, sexism, sexual activity, and risky activities such as driving. More than one-quarter of the 1,345 alcohol advertising occurrences contained content pertaining to risk, sexism, or sexual activity. Occurrences of addiction and risk themes were significantly more likely in those advertisements relating to brands with the highest youth-to-adult viewership ratios. Similarly, Smith et al. (2014) conducted a systematic content analysis of all beer, spirit, and alcopop magazine advertisements in the US between 2008 and 2010 and examined them for violation of both the US federal advertising regulations and the US industry guidelines. On the whole, the advertisements were found to be compliant with the advertising regulations, with only 23 advertisements noncompliant with federal regulations and 38 deemed to be in violation of the self-regulatory codes out of a total of 1,795 advertisements. However, despite high advertising code compliance rates, the authors argued that many of the advertisements contained content that portrayed positive alcohol norms and presented product attributes in a potentially problematic way. For example, many advertisements were assessed as aligning alcohol with social success and some as promoting unhealthy and irresponsible consumption of alcohol.

There is a clear discrepancy in the above two studies, with the first finding a high rate of advertising code violation and the second a low rate. This may be because the studies employed different coding frameworks and different samples of magazines over different time periods. Additionally, this discrepancy may have arisen because in the study conducted by Smith et al. (2014), emphasis was placed on determining advertisements to be in violation



of advertising codes only when the breach was overt and obvious, which may have differed from the criteria used in the study conducted by Rhoades and Jernigan (2013). Further studies in the context of the US may be required to explain this inconsistency in findings.

Other studies have examined community member and expert perceptions of whether alcohol advertising violates the self-regulatory advertising codes of the given country. Searle, Alston, and French (2014) assessed the extent to which a sample of 373 UK adults perceived television alcohol advertising to be in compliance with self-regulatory codes applying to advertising in the UK. Community members viewed and evaluated one of seven alcohol advertisements that had aired in the previous month on the two top commercial television channels in the UK. Seventy five percent of the participants rated the advertisements as being in violation of at least one section of the codes. The sections of the codes pertaining to linking alcohol with social success and implying that alcohol consumption causes a change in mood, physical condition, and/or behaviour were the most commonly violated across all advertisements, with each perceived to be breached by approximately half of the participants.

In a similar vein, Vendrame and colleagues (2015) examined whether adolescents and health and policy experts perceived the five most popular Brazilian beer advertisements to be in violation of self-regulatory alcohol advertising codes. The study also investigated whether there was a difference between adolescents and experts in their judgements of code violations. All of the advertisements were perceived to violate at least one of the sections of the advertising codes, and in aggregate the advertisements contained perceived violations in 11 of the 17 listed sections of the code. While overall expert and adolescent ratings were similar, there was a significant difference between young people and expert raters whereby experts identified more violations of the section of the codes relating to the encouragement of excessive alcohol consumption. Another study conducted by Siegel, DeJong, and colleagues (2016) analysed whether advertisements for alcohol brands known to be popular among young people are perceived by young people to be especially appealing. Advertisements were sampled by selecting those produced by the top 10 and bottom 10 brands consumed by youth in the US. The advertisements for popular youth alcohol brands were rated by young people as (i) having greater physical and social appeal, (ii) having greater appeal to underage youth, (iii) being more effective, and (iv) being more likable compared to brands that are unpopular among youth (Siegel, DeJong, et al., 2016). While the above studies examining community perceptions of alcohol advertisements are potentially less biased than ratings made by

researchers, the pools of advertisements that were selected in these studies were small and the findings may therefore not be generalisable to the broader body of alcohol advertisements or other geographical contexts.

The evidence presented thus far provides an indication of the themes alcohol marketers employ to promote their products. The high rate of code violation in the included studies shows that these themes often do not comply with voluntary advertising codes. Internal marketing documents secured by the UK House of Commons inquiry into alcohol suggest that for at least some marketers this may be intentional (Hastings et al., 2010b). These documents, drawn from four alcohol producers, indicate that some of the marketers aim to incorporate restricted themes in a way that does not explicitly violate the UK self-regulatory codes. For example, one briefing document for WKD vodka stated that the “communications challenge” is to portray themes without ever explicitly flouting the rules - “...this means we can’t rely on the staple ideas around getting pissed and shagging and need to be more creative and inventive with ideas” (Hastings et al., 2010, p. 48). There were many examples in the sourced campaign briefs and strategy documents where the alcohol marketers sought to incorporate content relating to targeting minors, promoting excessive consumption of alcohol, and linking alcohol with social success. Many documents referred to the need to recruit new drinkers to the brands (i.e., the “up and coming generation” p. 12) and to build brand loyalty with young people (e.g., Smirnoff Ice aimed to become “the most respected youth brand” p. 1). While the goal of recruiting young drinkers mostly referred to those above the legal drinking age, the boundaries were blurred on a number of occasions. For example, market data on 15 and 16 year olds were employed to guide campaign design in one case, and some products were specifically referred to as appealing to children (e.g., Lambrini was mentioned as a “kids’ drink” p. 1).

There were also many documented instances of attempts by marketers to link alcohol brands with social success. For example, products were described as “social glue” (p. 24) and marketers for one brand sought to “own sociability” in order to “dominate the booze market” (Hastings et al., 2010, p. 24). Furthermore, there were many examples of statements in the documents discussing how to stimulate greater consumption of alcohol. For example, shots were described as a way to “crank up the evening” and to “accelerate the process of getting drunk” (p. 17). In reference to an easy-drinking wine designed for young women, the marketer stated “They’ll drink bucket loads of the stuff and still manage to last the duration”

(p. 17). Given this evidence, the authors suggest that self-regulatory advertising codes may actually work against the goal of reducing prohibited themes by spurring greater creativity in alcohol advertising (Hastings et al., 2010b). It has therefore been suggested that regulations should be constructed to be unambiguous and set clear parameters for what can be included in alcohol advertising, which may reduce the tendency for alcohol marketers to avoid prohibited themes by creatively using alternative approaches that may be at least equally harmful (Noel, Babor, & Robaina, 2016).

### 5.3.1 Summary

The majority of recent studies addressing alcohol promotion strategies used in traditional media sought to identify the themes commonly employed in alcohol advertising and assess whether these were in violation of industry codes. Some also measured the extent of youth exposure to such advertising. There was a high rate of alcohol advertising code violation in most studies as determined by systematic content analyses and as perceived by expert and youth community members. Only one study found a low rate of advertising code violation in the US, but in this instance it was argued that many of the advertisements could be viewed as containing problematic content despite falling within the letter of the codes. There was also some indirect evidence of youth targeting. For example, the partying theme was used most commonly in television advertisements to promote drinks known to be heavily consumed by young people. There was a high proportion of alcohol advertisements concentrated in children's popular viewing times on Australian television and problematic content occurred disproportionately among US magazines with high youth exposure. These findings are supported by an extensive body of evidence prior to 2011 demonstrating that there is a high rate of content guideline violation in traditional media (Noel, Babor, & Robaina, 2016). Evidence secured in the UK from internal marketing documents of alcohol companies suggests alcohol marketers may aim to stay within the letter of advertising codes while still incorporating content pertaining to targeting minors, promoting excessive consumption of alcohol, and linking alcohol with social success. While these documents are from the UK, the global nature of the alcohol industry suggests that such strategies are also likely to be employed in other countries.

## 5.4 Youth exposure to alcohol advertising

A recent review, referred to in section 5.3, also systematically examined all English-language studies documenting youth exposure to alcohol advertising to date (Noel, Babor, & Robaina, 2016). In total, 57 peer-reviewed and non-peer reviewed articles using samples from 18 different countries were identified that assessed the extent of youth exposure to alcohol advertising. The studies consistently showed a high level of youth exposure to and awareness of alcohol advertising on several media channels including television, radio, print, digital, and outdoor. In many cases, children and adolescents were disproportionately exposed to alcohol advertising compared to those in older age brackets. There was also evidence to suggest that youth exposure to alcohol advertising has increased over time.

One new study measuring alcohol advertising exposure not captured by the above review was identified (Collins et al., 2016). This study set out to comprehensively examine youth exposure to alcohol advertising in the US using a data collection method called ‘ecological momentary assessment’. Middle school students (aged 11-14 years) carried hand-held devices for two weeks and documented their exposure to all types of alcohol promotion through traditional media, sponsorship, digital media, product placement, and point-of-sale promotions. The results showed that youth were exposed to an average of three alcohol advertisements per day, with African-Americans and girls reporting higher levels of exposure. Outdoor advertising accounted for the largest source of exposure (38%), followed by television advertising (26%). The authors reasoned that the high exposure to outdoor advertising may be due to the specific location in southern California, which was a densely populated urban area, and may not necessarily generalise to other countries with different urban density and transport patterns. Therefore, further studies in this vein should be conducted in other cultural contexts to determine if outdoor advertising is the dominant form of advertising to which young people are exposed.

## 5.5 Link between exposure and consumption

Given that youth may be exposed to a large amount of alcohol promotion that violates the spirit and letter of alcohol advertising codes, it is important to examine the potential impact of this exposure on drinking behaviour. Below, the body of recent research examining the link between exposure to alcohol promotion and youth alcohol consumption is reviewed.

Increasingly, studies that examine youth exposure to alcohol promotion through traditional media also measure exposure to more emergent forms of promotion such as those involving digital media. Unless the study only examined exposure to non-traditional media, it is included in the following analysis.

### 5.5.1 Cross-sectional studies

Seven studies were identified that used cross-sectional methods to examine the link between alcohol promotion and alcohol consumption among young people. Traditionally, studies in this area have been conducted at the product-category level and measured either self-reported exposure to all types of alcohol advertising or exposure to advertising by specific alcohol type (e.g., beer, wine). There is now a leading research group in the US called Alcohol Brand Research Among Underage Drinkers (ABRAND) that has conducted a considerable amount of work examining the link between *brand-specific* advertising exposure and alcohol consumption (for a summary of their work to date see Roberts et al., 2016). The rationale for this work is that because alcohol advertising and consumption occur at the level of the brand, it is important to assess brand-level data. Without this specificity, effects of advertising on consumption may be underestimated or masked completely (Roberts et al., 2016). For ease of interpretation of these two strains of research, studies are reviewed below according to whether they are conducted at the product-category or brand-specific level.

#### 5.5.1.1 Category-level studies

Four studies since 2011 were identified that examined the link between alcohol consumption and alcohol promotion at the product-category level. Three of these studies were cross-sectional in design (Faulkner et al., 2016; Jones & Magee, 2011; McClure et al., 2013) and the fourth employed ecological momentary assessment (this study used the same data collected by Collins et al. (2016) described in Section 5.4) (Martino et al., 2016).

The three cross-sectional studies examined whether alcohol advertising across a range of different media types is associated with youth alcohol consumption. Jones and Magee (2011) examined exposure to advertising across eight different media channels among 1,113 Australian 12-17 year olds. Self-reported exposure to alcohol advertising through magazines, bottle-shops, pubs/bars, and promotional materials was found to be significantly associated with early alcohol initiation. In addition, exposure to alcohol advertising in pubs/bars was

associated with regular consumption in the previous 12 months and exposure to magazine, Internet, and pub/bar advertising was associated with consumption in the past four weeks. Similarly, Faulkner and colleagues (2016) examined 4,413 Australian school students' (aged 12-17 years) self-reported exposure to alcohol advertising over a comprehensive range of media channels including television, radio, billboards, magazines, newspapers, sporting events, and the Internet. They also asked participants whether they were aware of any sports teams/players sponsored by alcohol companies and whether they currently or have ever owned any alcohol-branded merchandise. A high percentage of students reported at least weekly exposure to various types of alcohol advertising, with television/radio (58%) representing the most commonly mentioned sources of exposure. All else being equal, exposure to advertising via billboards/newspapers/magazines and ownership of at least one alcohol-branded item were significantly associated with both consuming alcohol in the past month and consuming alcohol at risky levels.

Finally, in a cross-sectional survey conducted by McClure and colleagues (2013) in the US, 1,734 participants aged 15 to 20 years were asked to report the amount of time spent watching television, amount of time spent on the Internet, favourite alcohol advertisement, ownership of alcohol-branded merchandise, and exposure to alcohol brands in movies. The researchers sought to examine possible mediators of the relationship between exposure to alcohol promotion and alcohol consumption. Self-identifying as a drinker (i.e., expressing agreement with statements such as "drinking is part of who I am") and identifying a favourite alcohol brand partially explained the significant relationship between two of the types of exposure to promotion (alcohol-branded merchandise ownership and movies) and increased likelihood of binge drinking (McClure et al., 2013).

Taking a different approach, Martino and colleagues (2016) employed ecological momentary assessment to measure real-time youth exposure to alcohol advertising in the US. A total of 558 middle school students (aged 11-15 years) carried a hand-held device for a two-week period and logged all exposure to alcohol advertising across all channels. Students were also randomly prompted at various points in time to answer questions about their alcohol beliefs. This methodology allowed for a more accurate estimate of exposure and the estimation of real-time influence of advertising on alcohol beliefs. At times of alcohol exposure compared to non-exposure, alcohol use was perceived by youth to be more normative and a typical person their age who consumes alcohol was perceived more favourably. There are potential

drawbacks to this methodology that are acknowledged by the authors. For example, the very act of carrying the device may have increased vigilance to alcohol advertising and may have encouraged deeper processing of the promoted messages. Furthermore, the study did not measure actual behaviour, only alcohol-related beliefs. Nonetheless, this study represents an important alternative to cross-sectional surveys because of the potential to reduce self-report bias, and it is notable that the findings are similar to those using other data collection methods.

#### 5.5.1.2 Brand-specific studies

There were two studies that examined the link between brand-specific exposure to advertising on television and alcohol consumption among youth. Ross, Maple, and colleagues (2014) conducted an online survey of youth aged 13-20 years to assess which of a list of 20 television shows popular among youth they had viewed in the past 30 days. This allowed the authors to calculate the likely exposure to advertising that occurred during those shows. There was a positive association between estimated exposure to alcohol brand advertising and the number of drinks consumed in the past 30 days. At low levels of exposure there was a strong relationship between exposure and brand-specific consumption, with diminishing effects as the level of exposure increased. Ross and colleagues (2015) used the same methodology to examine exposure data aggregated at the population level. Brands that were advertised on the 20 television shows popular among youth were consumed by youth at a rate four times that of brands not advertised on the shows. This relationship held over and above the influence of the amount spent on advertising and the brands' market shares. Once again, there was a strong relationship between advertising and consumption at lower levels of exposure, with the relationship plateauing at higher levels of exposure.

A further two studies investigated brand-specific advertising in both magazines and on television. Ross, Ostroff, and colleagues (2014) assessed the relationship between brand-specific alcohol advertising in magazines and youth alcohol consumption. Alcohol advertisements in 124 nationally distributed magazines and readership data for male and female audiences aged 12-20 years were accessed. The brands identified in prior survey data as being most commonly consumed by young people had the highest levels of advertising in magazines with the highest levels of readership among 18-20 year olds. Siegel and colleagues (2016) examined the relationship between alcohol consumption and exposure to advertising

for specific alcohol brands on television and in magazines. They found that underage youth were over five times more likely to consume brands that were advertised on national television and 36% more likely to consume brands that were advertised in national magazines compared to brands that were not advertised in these media.

### 5.5.2 Longitudinal studies

Over the past 15 years there have been multiple longitudinal studies examining the link between exposure to alcohol advertising and alcohol consumption, which have in turn been subjected to systematic reviews. Due the strength of this methodological approach, papers prior to 2011 are included in this section to better represent the robustness of the existing evidence base. Two systematic reviews published in 2009 examined the link between advertising exposure and alcohol consumption (Anderson et al., 2009; L. Smith & Foxcroft, 2009). Both reviews employed strict criteria for study selection and concluded that there is high quality evidence showing a link between exposure to advertising and alcohol consumption. Smith and Foxcroft's (2009) review covered seven longitudinal studies across multiple countries with a total of 13,000 young people aged 10 to 26 years. The studies measured youth exposure to alcohol promotion via traditional media channels (e.g., broadcast and print media) and also below-the-line methods of promotion (e.g., in-store promotions and portrayal of alcohol in movies, music videos, and television programmes). All seven studies demonstrated significant effects of alcohol promotion on youth alcohol consumption. Specifically, exposure to alcohol promotion led to earlier alcohol initiation and higher levels of alcohol consumption.

Anderson et al. (2009) reviewed 13 longitudinal studies that measured exposure to alcohol promotion across a total of 38,000 children, adolescents, and young adults aged 10 to 26 years (this review included the seven studies covered in Smith and Foxcroft's review above). Exposure was measured through estimates of the volume of media and advertising exposure in a given geographical location, ownership of branded merchandise, self-reported recalled exposure to advertising, and receptivity to advertising. Twelve of the 13 studies found a link between adolescent exposure to alcohol promotion and both the earlier onset of drinking and increased alcohol consumption. The thirteenth study did not measure behaviour, but found a link between exposure and intention to drink.



Since these two major reviews were published, there have been several further longitudinal studies that similarly examined the link between initial exposure to alcohol advertising and subsequent alcohol consumption. Jernigan et al. (2016) performed a systematic review of relevant papers published in English-language journals since 2009. The review reported on 12 studies that used nine distinct cohorts involving 35,129 participants aged 10 to 23 years from Europe, Asia, and North America. All 12 studies supported the findings of the two earlier reviews. That is, higher levels of advertising exposure and/or receptivity at baseline were associated with greater likelihood of early initiation, alcohol consumption, and problematic usage at a later point in time. Several of the studies found significant associations between alcohol advertising exposure at baseline and subsequent initiation of alcohol use. In other studies there was a clear relationship between alcohol advertising receptivity and subsequent binge drinking and/or hazardous drinking at follow-up. The effect sizes across the studies were small to moderate.

One additional longitudinal study was identified that was published after Jernigan et al.'s (2016) review. Among a sample of US youth aged 15 to 23 years, exposure to alcohol advertising containing the partying theme identified in Morgenstern et al.'s (2015) content analysis (described in Section 5.3) was a significant predictor of later alcohol consumption among youth after accounting for the influence of exposure to other themes (Morgenstern, Li, Li, & Sargent, 2016).

### 5.5.3 Experimental studies

A recent systematic review and meta-analysis evaluated experimental studies examining the link between exposure to alcohol advertising and alcohol consumption (Stautz et al., 2016). The authors did not place a date limitation on the search. The returned studies dated from the 1980s to 2015. Analysis of seven studies indicated that viewing alcohol advertisements led to an increase in immediate alcohol consumption compared to viewing non-alcohol advertisements. This translated to an increase of approximately 1.57 alcohol units per day for males and 0.99 units for females (Stautz et al., 2016, study 1). A second analysis of six studies pertaining to product placement found that viewing alcohol portrayals on television and in films did not increase alcohol consumption (Stautz et al., 2016, study 2). However, the authors noted that due to underpowered analyses and unclear risk of bias in some of the included studies, confidence in these results was relatively low. As such, they recommended

that further work be conducted and integrated into future meta-analyses to examine if there is an effect of alcohol product placement in films and television on alcohol consumption.

#### 5.5.4 Summary

Recent research provides strong and converging evidence that alcohol promotion affects the initiation of drinking, the amount of alcohol consumed, and the likelihood of engaging in problematic drinking among a range of different youth age-brackets and across many different socio-cultural contexts. These results are stable when controlling for a broad set of potentially confounding variables. These findings are consistent with the body of work published prior to 2011 (Anderson et al., 2009; L. Smith & Foxcroft, 2009). It is acknowledged that the studies reported here have various limitations, particularly in terms of the considerable variation in the measurement approaches employed, which makes meta-analyses of the findings difficult. However, given the heterogeneous samples and differing research methodologies employed in the above studies, the consistency in findings attests to the robust nature of the effects observed.

A recent development to emerge over the past five years is the study of the link between brand-specific advertising and consumption of the particular alcohol brands being promoted. To briefly summarise, this body of research demonstrates that the brands to which youth are most often exposed in magazines and television advertising correspond with the brands they most commonly report consuming. While the nature of the causal relationship is not clear and it is possible that alcohol marketers are simply responding to youth preferences, the link between the amount of brand-specific advertising to which youth are exposed and the amount of those brands of alcohol they consume suggests that it is the advertising that is affecting consumption rather than the other way around.

There seems to be some inconsistency in the nature of the relationship between exposure and consumption between studies conducted at brand- and product-category levels. Product-category studies often find a direct relationship between advertising exposure and consumption whereby consumption increases in a linear fashion as exposure increases. By comparison, studies using brand-specific data also find effects of advertising on consumption, but they diminish at higher levels of exposure. More research is needed to determine the reasons for this discrepancy in findings. Furthermore, currently all brand-specific data are

cross-sectional in nature and generated in the US. There is thus a need for further brand-specific research that uses longitudinal and experimental designs in other socio-cultural settings.

## 5.6 Implications for regulation

The alcohol industry maintains that (i) the purpose of advertising in a highly saturated market is to increase brand loyalty rather than increase the volume of consumption and (ii) advertising does not have a significant effect on the amount of alcohol consumed by youth (e.g., Diageo Australia, 2012). However, this chapter outlines the robust evidence base demonstrating that exposure to alcohol promotion contributes to the earlier initiation of alcohol consumption, increased alcohol consumption, and the likelihood of youth engaging in problematic drinking. Many researchers have argued that the strong evidence base warrants immediate action to introduce mandatory regulations (Bosque-Prous et al., 2014; Lobstein et al., 2016; Noel, Babor, & Robaina, 2016; Stautz et al., 2016; Weaver, Wright, Dietze, & Lim, 2016). In addition, in a recent commentary it was argued that in the absence of such action to date, research attention should now be focused on investigating the possible barriers impeding the translation of this evidence base into meaningful policy action to reduce overall levels of alcohol advertising (O'Brien & Carr, 2016).

Based on research results to date, many researchers have called into question the effectiveness and legitimacy of using self-regulatory codes to govern alcohol advertising. High rates of advertising code violations in alcohol advertisements on traditional media have been found across many different countries, indicating that industry self-regulation is not operating effectively. It is postulated that this is likely due to the inability to enforce regulations or impose sanctions on those who breach the codes (Australian Medical Association, 2012; Noel & Babor, 2016). Therefore, it has been argued that advertising codes should be supported by meaningful, government-mandated sanctions (Noel & Babor, 2016). Furthermore, the scope of the codes in many countries does not address the volume or placement of advertising. This is problematic given the cumulative effects of advertising, the high level of youth exposure to alcohol advertising, and evidence showing that content known to appeal to young people can be disproportionately concentrated in media with higher youth exposure. As such, it is argued that advertising codes should contain provisions relating to the volume and placement of alcohol advertising, as well as the content

(Australian Medical Association, 2012; Australian National Preventive Health Agency, 2014).

It has also been argued that voluntary codes are not only ineffective, but may be antithetical to the goal of harm reduction by constituting a largely tokenistic and ineffective approach to regulation that allows the alcohol industry to deflect scrutiny and responsibility, ultimately inhibiting meaningful action or legislation (Smith et al., 2014). As noted by Hastings and colleagues (2010b), restrictions on certain content may spur greater promotional creativity, resulting in the use of more subtle ways of communicating prohibited themes that defy analysis by regulators and may operate at the implicit level of consciousness. Given the growing evidence base relating to the effectiveness of implicit promotional techniques over and above the effects obtained when delivering explicit messages (Chartrand & Fitzsimons, 2011; Poehlman, Dhar, & Bargh, 2016; N. C. Smith, Goldstein, & Johnson, 2013), this approach may actually be a more powerful method of alcohol promotion. Therefore, it has been suggested that for alcohol advertising codes to be effective and avoid ambiguity, they need to be designed such that they stipulate what can be included in alcohol advertisements, rather than what cannot be included (Gallopel-Morvan et al., 2016).

## 5.7 Chapter summary

Research into alcohol promotion disseminated via traditional media shows that the current state of affairs presents cause for concern. There is a considerable body of evidence indicating that alcohol advertising commonly violates both the spirit and the letter of advertising codes. This conclusion can be drawn from studies showing a high rate of advertising code violation and explicit evidence from internal industry marketing documents demonstrating that alcohol advertisers aim to flout the spirit of advertising codes.

Furthermore, studies show that alcohol advertisements that violate industry codes are disproportionately concentrated in media to which youth are frequently exposed, and that youth exposure to alcohol promotion has increased over time. A large body of evidence indicates that exposure to alcohol promotion leads to earlier initiation of alcohol consumption and higher alcohol consumption among young people. Suggestions for change include ensuring that advertising codes are unambiguous, include meaningful sanctions for code violations, and cover not only the content but also the volume and placement of alcohol advertising.

Table 1 below provides a summary of the assessed quality of the major findings within traditional media. As is clear from the table, the evidence supporting the major findings in this area tends to be of moderate to high quality, and is based on large and consistent bodies of evidence that have been tested in many different samples.

*Table 1. Quality assessment ratings for traditional media research*

Finding	Method	Strength	Size of body of evidence	Sample			Consistency
				Countries	Conducted in Australia	Sample age range	
1. Young people have high exposure to, and high awareness of, alcohol advertising on traditional media.	- Review (n = 1, 57)* - Exposure (n = 1)	Moderate Moderate	Large	Many	Yes	Many	Consistent
2. Alcohol advertising on traditional media has a high rate advertising code violation, including content that appeals to children and adolescents.	- Review (n = 1, 44)	Moderate	Large	Many	Yes	NA	Consistent
3. Alcohol advertising has used similar themes over time such as physical success, relaxation, humour, health, and the inclusion of young, attractive celebrities.	- Review (n = 1, 44)	Moderate	Large	Many	Yes	NA	Consistent
4. Alcohol marketers aim to violate the spirit of advertising codes.	- Qualitative (n = 1)	Moderate	Small	One	No	NA	NA
5. Exposure to alcohol advertising through traditional media leads to higher youth alcohol consumption.	- Review (n = 3, 25) - Quantitative (n = 4)	High Moderate	Large	Many	Yes	Many	Consistent
6. Brand-specific exposure to alcohol advertising leads to higher consumption of those brands among young people.	- Quantitative (n = 4)	Moderate	Small	One	No	Some	Consistent

\*For review studies, the first number in brackets refers to the number of reviews and the second number refers to the total number of unique studies included in the reviews.

## 6 Sports sponsorship and advertising during sports events

### **Summary of major findings:**

- Promotional activities at live sporting events can create an atmosphere that normalises the association between sport and alcohol consumption.
- Alcohol advertisements aired during broadcasts of live sporting events consistently violate many elements of voluntary international and Australian alcohol advertising codes.
- A loophole in Australian advertising regulations that allows alcohol advertising during daytime sports programming means that children are exposed to a substantial amount of alcohol advertising on television.
- Children and adolescents are exposed to a high number of visual references to alcohol during televised sporting events (53-215 per hour).
- Children and adolescents are able to accurately connect sports teams with relevant sponsors.
- Exposure to alcohol brand appearances during sporting events leads to greater familiarity with the promoted brands and positive implicit associations with the brand as well as alcohol more broadly.
- Alcohol sponsorship is associated with higher levels of problematic drinking among sponsored athletes.
- Sponsorship is perceived by alcohol marketers as an important tool for alcohol promotion because of the ability to harness strong emotions and permeate youth culture.
- Common suggestions for regulation include increasing the scope of advertising codes to include sponsorship and closing the loophole that allows alcohol advertising during sports programming.

## 6.1 Introduction

In Australia and elsewhere it is common for alcohol companies to sponsor sports (Australian Medical Association, 2012; Jones, 2010). This involves alcohol companies buying the rights to link their products with specific sporting events and/or teams (Cornwell & Maignan, 1998). Sponsorship arrangements encompass a range of promotional activities including naming rights of teams and events, commercial break advertisements during live broadcasts of sporting events, 'pourage rights' (i.e., exclusive rights to sell their brands at the events), and the opportunity to promote products through branded uniforms, signage, and merchandise (Cornwell, 1995).

Sponsorship is an influential form of alcohol promotion for multiple reasons. First, it provides brand awareness through exposure, potentially leading to the formation of positive emotional associations between the alcohol brand and an already pleasurable event (Lings & Owen, 2007; Wang & Kaplanidou, 2013). Second, sponsorship allows alcohol companies to position themselves as a socially responsible force in the community through their support of an activity that is viewed as beneficial and healthy (Beus, Matanda, & Michael, 2016; Casswell, 2013). Third, it provides a key avenue for recruiting young drinkers (Jones, 2010) given that sporting events are attended and viewed by large numbers of young people (Australian Bureau of Statistics, 2011; Carr et al., 2016).

Despite being a recognised component of the promotional mix in the marketing literature (Cornwell & Kwak, 2015; Khan, 2014), sponsorship is currently not considered within the purview of alcohol advertising regulatory codes in Australia and many other countries. As well as the clear benefits of sports sponsorship arrangements to alcohol companies, some argue that alcohol sponsorship of sport may be particularly entrenched because many sports organisations hold a strong vested interest in these arrangements (Jones, 2010). Indeed, there is some evidence to suggest that sports organisations are complicit in the process of maintaining the current state of play, with representatives of sports organisations speaking favourably about sponsorship and lobbying for the continuation of unregulated alcohol sponsorship (Jones, 2010).

This chapter provides a review of the growing body of research relating to the nature and prevalence of alcohol sports sponsorship strategies, the extent of youth exposure to alcohol-



related sports sponsorship content, and the impact of sponsorship on alcohol-related beliefs and behaviours.

## 6.2 Research context

While sponsorship is not a new form of promotion, there has been relatively little research in the specific area of the sponsorship of sporting events by alcohol companies (Brown, 2016). The research published since 2011 makes up the majority of the work in this area, and is therefore an accurate reflection of the literature to date. However, it should be noted that there is a much more comprehensive evidence base pertaining to the sponsorship activities of tobacco companies and this evidence base can be used to understand the current state of play regarding alcohol.

Tobacco promotion in most forms, including sponsorship, is now banned in many nations (World Health Organization, 2013). In the 1980s-1990s, considerable research was carried out in this area and served as an important precursor to the strong regulatory approaches now in place. This body of research shows that tobacco marketers used sponsorship to associate their products with images and identities that are desirable to youth and to circumvent regulations applying to other forms of promotion (Crompton, 1993; Dewhirst & Hunter, 2002; Dewhirst & Sparks, 2003; Hastings & MacFadyen, 2000). Furthermore, the results of the removal of tobacco sponsorship in many countries demonstrate that total bans on sponsorship can assist in decreasing tobacco use among the public (World Health Organization, 2013).

## 6.3 Sponsorship strategies

Seven studies published since 2011 were identified that examined alcohol-related sport sponsorship strategies. These studies approached the understanding of sponsorship in quite different ways. In the first two studies, researchers observed and analysed branding practices at live sporting events (Gee, 2013; Gee, Jackson, & Sam, 2016), and one of these studies also examined the general promotional practices associated with alcohol sponsorship (Gee, 2013). A further two studies examined sponsorship practices of alcohol companies at community sports clubs (Pinsky et al., in press; Sawyer et al., 2012), and another two examined the content of sponsorship-linked commercial break advertising during live television broadcasts of sporting events and assessed these advertisements for violations of alcohol advertising

codes (Kelly, Ireland, Alpert, & Mangan, 2015; Noel, Babor, Robaina, et al., 2016). The final study, which was also cited in the traditional media chapter, examined internal marketing documents of alcohol companies (Hastings et al., 2010b). All of these studies are described below to provide insights into the sponsorship activities of alcohol companies.

Gee and colleagues observed and critically examined alcohol sponsorship strategies at live sports events in New Zealand (Gee, 2013; Gee et al., 2016). In one study, alcohol branding practices and spectator perceptions of alcohol were explored at a live Rugby Sevens Tournament (Gee et al., 2016). Surveys of 106 attendees showed that people perceived a normalised role of alcohol consumption at the event. Additionally, alcohol was thought to contribute to the positive atmosphere of the event and the majority of the survey respondents reported a perceived link between alcohol consumption and positive social experiences. An analysis of the extent and nature of branding at the event revealed pervasive and sophisticated strategies designed to normalise alcohol use and increase alcohol consumption. There were 43 outlets selling alcohol, an alcohol-branded stage and dancing area, and branded competitions (e.g., rugby balls were shot into the crowd and the catchers received alcohol-branded prizes). The authors argued that such practices help to create a ‘carnavalesque’ culture that communicates a tacit message to consume large quantities of alcohol.

Similarly, Gee (2013) conducted a qualitative analysis of sports sponsorship at the Rugby World Cup in New Zealand and the associated branding practices that occurred around the country during this time. Results of observational analyses at the live sporting event indicated that alcohol symbols and promotions were ubiquitous and may have served to consolidate the link between alcohol and sport. Furthermore, the author examined promotional activities that occurred outside of the actual sporting event. There were widespread alcohol-related promotional activities in the lead up to the event, including billboard advertising, advertising in the New Zealand national airline’s in-flight magazine, and special promotions in supermarkets. The author also observed multiple ‘fan-zones’ – that is, alcohol-branded spaces located in the entertainment districts of major cities. It was proposed that such spaces were designed to create anticipation for the event within a branded space.

Two studies examined sponsorship strategies of the alcohol industry at the community sport rather than professional sport level (Pinsky et al., in press; Sawyer et al., 2012). The first examined industry sponsorship of 101 sports clubs in New South Wales (Sawyer et al.,

2012). There was a substantial presence of alcohol industry sponsorship, with 88% of all surveyed clubs reporting sponsorship arrangements. The majority of clubs (78%) received part of their support in the form of monetary funding, and a smaller proportion (20%) received support through discounted or free alcohol supplied by the alcohol company. Small clubs were more likely to receive free or discounted alcohol compared to large clubs.

The second study explored the practices of alcohol sponsorship at universities in Brazil (Pinsky et al., in press). Semi-structured interviews were conducted with board members of university sports-clubs. Most of those interviewed reported that their club had formalised contracts with alcohol companies. The most frequently cited form of sponsorship arrangement was the provision of free or discounted beer at sports-related social events. The supply of T-shirts, beer freezers, and stereo systems and assistance with promotional activities to support sports-related student parties were also common. These benefits were often in exchange for arrangements whereby only the sponsor's brand of alcohol would be supplied at the event. Interviewees were described as exhibiting an uncritical evaluation of the impact of alcohol sponsorship, with many alluding to the harms associated with alcohol consumption, but none acknowledging the potential influence of sponsorship.

There is also research demonstrating that the advertisements aired in commercial breaks during televised sporting events contain content that violates industry advertising codes. Kelly, Ireland, Alpert, and Mangan (2015) coded the content of sponsorship-linked alcohol advertisements during four major televised sporting events in Australia in 2010 and 2011. The relevant sporting events were the Cricket Final, the National Rugby League Grand Final, the AFL Grand Final, and the Melbourne Cup (horseracing). The advertisements were coded on a range of features that have been found to appeal to young adult audiences. These included young, attractive, and/or celebrity models; humorous or attractive mascots; relevant sub-cultural cues such as pop music; and themes relating to sports, success, and humour. They found that most sponsorship-linked advertisements adopted humour or sports themes, and many portrayed attractive young models and linked the consumption of alcohol to sporting or sexual success.

In a similar vein, Noel, Babor, Robaina and colleagues (2016) analysed alcohol advertisements shown across six nations during the 2014 FIFA World Cup Tournament. The advertisements were assessed for compliance with international advertising guidelines

proposed by the alcohol industry (International Alliance for Responsible Drinking's Guiding Principles). Across all countries, 86% of the 89 unique alcohol advertisements violated at least one of the guiding principles. The majority of advertisements portrayed alcohol as contributing to social success, sexual attractiveness, and enhanced physical or mental ability and depicted excessive alcohol consumption. The authors argued that as well as explicit code violation during the advertisements, the in-game visual references to alcohol in the form of signage and branded uniforms could be construed as violating codes that prohibit linking alcohol with sporting success (Noel, Babor, Robaina, et al., 2016).

Given that the above study was conducted across different countries, it was possible to examine whether code restrictiveness had an effect on the extent of code violation. Two countries with highly restrictive legislation (Finland and France) were found to have no alcohol advertisements on commercial television stations during broadcasts of 2014 World Cup matches, and were therefore unable to be included in these analyses. For the other countries, no differences were found according to overall code restrictiveness, however when analysed at the level of specific code provisions there were fewer advertisements that violated provisions pertaining to 'minors' and 'responsible marketing communications' in countries with stricter codes. Therefore, it seems the restrictiveness of a given country's policy has some bearing on the rate of specific code violations.

There is evidence to suggest that some alcohol marketers regard sporting events as key arenas to recruit young drinkers. Internal marketing documents from alcohol producers secured as part of the previously mentioned health inquiry by the UK House of Commons give some insight into the benefits alcohol marketers perceive to accrue from sports sponsorship. The documents indicated that sporting events are selected for sponsorship in an attempt to show that the alcohol brands understand and relate to young people (in this case, young men), and to harness the emotions experienced during the game (e.g., "...give LDA-21 [Legal-drinking-age] males a reason to believe in the product whilst building an emotional connection to the 'vivid me' state").

### 6.3.1 Summary

The studies described above provide important insights into the strategies employed by alcohol companies when engaging in sports sponsorship. First, there is evidence from New

Zealand that sponsorship practices at live sporting events by alcohol companies may serve to normalise high alcohol consumption through pervasive alcohol promotion that creates a ‘carnavalesque’ atmosphere. Research from Australia and Brazil suggests that alcohol sponsorship of university sports clubs may be very common in these countries and includes practices such as the supply of free or discounted drinks and the provision of monetary support. There is also evidence that alcohol advertising in commercial breaks during the televised screening of live sporting events has a high number of advertising code violations, including the presence of content that appeals to youth. Furthermore, there is explicit evidence from internal alcohol marketing documents in the UK that sponsorship of sporting events is used to recruit and build brand capital among young people, especially young men.

## 6.4 Frequency and exposure

### 6.4.1 Frequency of alcohol-references during sporting events

Five studies were identified that measured the frequency of alcohol references during alcohol-sponsored sporting events. The standard methodology was to record televised sporting events and then code the number and type of references to alcohol. Events were coded based on some or all of the following: visual in-game references (generated from signage, uniforms, etc.), verbal in-game references (usually made during sports commentary), and alcohol advertising during commercial breaks.

Two of the identified studies were conducted in Australia. Davoren and Sinclair (2012) examined the number of visual references to alcohol during the 2008 broadcast of the Bathurst V8 car race. Commercial break advertising and on-screen alcohol references derived from sponsorship (e.g., branding on the track) were recorded. In a one-hour period there were 53 instances of visual alcohol references. Jones, Barrie, Chapman, Corr, and Davoren (2013) examined the number of alcohol-related references during the 2012 Grand Finals for NRL and AFL. Televised broadcasts of the games were downloaded and coded by type and duration of alcohol promotion during both game coverage and commercial breaks. On average, almost one-fifth (18%) of the match screen time featured visual references to alcohol and 5% of all screen time was accounted for by alcohol advertising during the commercial breaks.

The next two studies analysed the frequency of alcohol references during sports events broadcast in the UK (Adams, Coleman, & White, 2014; Graham & Adams, 2014). Graham and Adams (2014) quantified the number of verbal and visual references to alcohol during a televised English Professional Football match in the UK. There was an average of two verbal references to alcohol and approximately 111 visual references to alcohol per hour of broadcast. Appearances of alcohol-related content were primarily in the form of billboards and signage for beer products, whereas verbal references mainly related to the title sponsorship of the games (e.g., Carling Cup, The Budweiser FA Cup). Alcohol advertisements aired during commercial breaks accounted for less than 1% of the total broadcast time. Similarly, Adams, Coleman, and White (2014) examined the frequency of alcohol-related content during the Union of European Football Associations Championship that was broadcast in the UK. Eight matches were randomly selected and coded for all visual references to alcohol. There was an average of 74 visual references to alcohol per hour of broadcast and most of these (73%) occurred during the game rather than the commercial breaks. There were more visual references to alcohol in matches that featured the UK team compared to matches that did not feature this team, indicating that fan targeting was at play.

Finally, one study examined the number of in-game and commercial-break appearances by alcohol brands during five matches of the FIFA World Cup broadcast in four countries (Brazil, Canada, Mexico, and the US). On average, there were 165 in-game and 50 out-of-game alcohol brand appearances per hour of broadcast (Noel, Babor, Robaina, et al., 2016).

#### 6.4.2 Youth exposure to alcohol advertising during televised sporting events

Given the high frequency of alcohol references during televised sporting events, it is important to determine the demographics of viewers during these events to provide an indication of youth exposure. As noted previously, media authority codes in Australia prohibit alcohol advertising from appearing on television during children's popular viewing times with the exception of during sports programming. This loophole has the potential to result in high youth exposure, resulting in two studies being undertaken to assess the extent of this exposure.

In the first study, Carr and colleagues (2016) examined exposure to alcohol advertising for both children (0-17 years) and young adults (18-29 years) using purchased data for all AFL,

cricket, and NRL broadcasts for 2012. The programs had a cumulative audience of 26.9 million children and 32 million young adults. Children were exposed to 51 million instances of alcohol advertising, with almost half (47%) of these exposures taking place during the day (6:00am – 8:29pm). Additionally, children were found to be watching television past the watershed time of 8:30pm. Their exposure to alcohol advertising peaked between 8:30pm and 9:30pm, which was the same as for young adults.

In the second study, O'Brien and colleagues (2015) quantified the number of alcohol advertisements broadcast during all sport and non-sport television programming in daytime and evening periods in Australia during 2012. They also accessed data on the proportions of viewing audiences that were children (0-17 years) or young adults (18-29 years). On average, most daytime alcohol advertising was concentrated during sports events (87%), whereas most evening alcohol advertising was aired during non-sport television (86%). It was also found that there was a similar number of children viewing television in the evening ( $n = 273,989$ ) compared with during the day ( $n = 235,233$ ) (O'Brien et al., 2015). Furthermore, it appears that many children are watching television after 8:30pm, indicating that the current Australian 8:30pm watershed may be ineffective in minimising exposure.

### 6.4.3 Summary

The results of the reviewed studies provide evidence that televised sporting events feature high frequencies of alcohol references that may be viewed by large numbers of young people. In particular, visual references to alcohol during televised sporting events (e.g., signage, billboards, uniform branding, and advertising during commercial breaks) are very frequent, with between 53-215 visual references to alcohol per hour. On the other hand, traditional alcohol advertisements and in-game verbal references to alcohol brands generally accounted for a small proportion of total alcohol references during sporting events. Research also indicates that by permitting alcohol advertising in sports programming during the day, many children are frequently exposed to alcohol advertising. In addition, it appears that the Australian 8:30pm watershed time is ineffective given that large numbers of children view television up until 9:30pm.

There were some limitations to the studies included in this section of the review. First, the studies pertaining to frequency and exposure generally examined a limited subset of sporting

events. Therefore, it is unclear whether these findings would generalise to all sporting events. Second, the studies that specifically examined youth exposure to alcohol advertising only measured advertising occurring during commercial breaks and did not measure sponsorship activities during the game. Given the identified high frequency of in-game visual references to alcohol that are largely the result of sponsorship activities, these findings are likely to underestimate the extent of young people's exposure to alcohol-related content.

## 6.5 Link between exposure to sponsorship and alcohol-related beliefs, intentions, and behaviours

The extent of youth exposure to alcohol promotion stemming from industry sponsorship of sporting events makes it essential to investigate any links that may exist between sports sponsorship and youth alcohol consumption. One review and three empirical studies have examined the link between sponsorship and children and young adults' alcohol-related beliefs and behaviours. These studies used a range of different methodologies: two employed a technique designed to capture implicit brand recognition that is described below (Bestman, Thomas, Randle, & Thomas, 2015; Pettigrew, Rosenberg, Ferguson, Houghton, & Wood, 2013), one was an experimental study (Zerhouni, Bègue, Duke, & Flaudias, 2016), and the review summarised cross-sectional and longitudinal studies examining the link between sponsorship and alcohol consumption (Brown, 2016).

Two studies used a novel technique to examine whether children assimilate sponsorship messages (Bestman et al., 2015; Pettigrew, Rosenberg, et al., 2013). Pettigrew, Rosenberg, Ferguson, Houghton, and Wood (2013) conducted a study in Australia to examine whether young people form implicit associations between sporting teams and their sponsors. Children aged 4-15 years were shown a whiteboard with a range of magnets featuring the logos of alcohol, fast food, and gambling brands and a separate whiteboard with magnets featuring the logos of sports teams. Children were told they could place the brand magnets anywhere on the whiteboard with the team logos. Importantly, the children were not given any prompts relating to sponsorship. Seventy-five percent of the children matched at least one brand magnet with a sporting team sponsored by that brand. Using the same methodology, Bestman, Thomas, Randle, and Thomas (2015) examined whether children and adolescents aged 5 to 12 years could correctly match player jerseys with relevant alcohol, fast food, and gambling sponsors. The results were very similar to Pettigrew and colleagues' study. Three



quarters (77%) of the children linked at least one sports jersey with the correct sponsor. Therefore, it seems that sponsorship of sports by the alcohol industry may be contributing to brand awareness among children and adolescents.

One experimental study conducted in France demonstrated the link between exposure to alcohol-related sports marketing and positive attitudes towards alcohol among young adults with an average age of 21 years (Zerhouni et al., 2016). Undergraduate university students were randomly assigned to view one of two different video excerpts of sports games. The first video was taken from the Rugby Heineken World Cup and had multiple visual references to alcohol in the form of banners and logos displayed on players' uniforms, referee uniforms, and on the field. The second video was of a rugby game with similar sponsorship references that were unrelated to alcohol. Matches were selected that had a similar amount of action. After viewing the videos, participants completed lexical decision tasks and affective priming tasks, which are commonly used methods in psychological studies designed to tap into implicit attitudes towards a given stimuli. Compared to those in the non-alcohol exposure condition, participants in the alcohol exposure condition had more favourable implicit attitudes towards the specific alcohol brand and alcohol in general and were faster to detect alcohol brand names. The researchers reasoned that the results were likely due to the 'mere exposure' effect, which is the tendency to develop a preference for something merely from repeated exposure (i.e., familiarity breeds liking).

There was one review that examined all English-language articles that have studied the link between sports sponsorship and alcohol-related outcomes (Brown, 2016). Seven relevant studies were included in the review that encompassed 12,760 participants from Australia, the UK, the Netherlands, New Zealand, Germany, Italy, and Poland. Two studies were identified that found awareness of and exposure to sports sponsorship was linked with higher alcohol consumption among schoolchildren (aged 13-15 years). One of these studies was longitudinal, and as such, causality was able to be inferred. Additionally, five studies assessed the relationship between alcohol industry sponsorship of athletes and problematic alcohol consumption. All of these studies found that those receiving alcohol industry sponsorship were more likely to be hazardous drinkers than those who did not receive such sponsorship. The studies included athletes from both university and community sports clubs. There is a limitation of these five studies that should be noted – it cannot be ruled out that

problematic drinkers would be more likely to accept alcohol company sponsorship. Therefore, longitudinal studies are required to determine the causal order of this relationship.

### 6.5.1 Summary

Similar findings emerged from studies using different methodologies to assess the link between alcohol sponsorship and alcohol consumption. The results of experimental work (Zerhouni et al., 2016) and the novel methodology designed by Pettigrew and colleagues (2013) attest to the ability of sponsorship to lead to familiarity with alcohol brands and positive attitudes to alcohol more broadly. Furthermore, the cross-sectional and longitudinal surveys showed that exposure to alcohol sponsorship is associated with increased consumption of alcohol among schoolchildren and that alcohol sponsorship is associated with a greater likelihood of hazardous drinking among athletes. Further research should examine the relationship between sports sponsorship and the extent of alcohol consumption among fans, as well as sportspeople. Additionally, more longitudinal evidence is required to confirm the causal order of such an effect.

## 6.6 Implications for policy

There appear to be fundamental contradictions within the current regulatory framework in Australia. The ABAC stipulates that alcohol promotion should not link alcohol consumption with sporting prowess, yet it does not cover sports sponsorship that allows extensive in-game branding that may lead to the formation of implicit associations between sport and alcohol among children and young adults. Additionally, the media code of practice that restricts alcohol advertising on television during children's popular viewing times is waived for sports programs. That is, during the times that young people are likely to watch television, alcohol advertising is permitted as long as it occurs within the context of sports programming.

Several important avenues for regulation are commonly suggested in the reviewed literature. First, it is argued that sponsorship should be included within the purview of alcohol advertising codes (Australian Medical Association, 2012; Hastings et al., 2010a). Next, it is argued that the Australian loophole allowing alcohol advertising in children's viewing times during sports programs should be closed (Carr et al., 2016; O'Brien et al., 2015). The research reported here also questions the effectiveness of the 8:30pm watershed time given that youth television viewing peaks between 8:30pm and 9:30pm (Carr et al., 2016; O'Brien

et al., 2015). Further, it is often noted that the high frequency of alcohol advertisement code violations during sporting events should be addressed due to the high numbers of children viewing these ads. Many authors argue that given the consistently high rate of code violations, an overhaul of the current self-regulated systems is warranted - preferably to include statutory-enabled and meaningful sanctions (Bosque-Prous et al., 2014; Lobstein et al., 2016; Noel, Babor, & Robaina, 2016; Stautz et al., 2016; Weaver et al., 2016).

While it may be argued that there would be detrimental financial implications of prohibiting alcohol sponsorship of sport, this same argument was put forward when bans on tobacco were first proposed, yet many countries, including Australia, have successfully replaced tobacco with other sponsors (de Bruijn, 2014). Additionally, there is evidence from other cultural contexts that a thriving sports culture and the running of national and international sporting events is still possible. For example, France has a law that restricts all alcohol sponsorship of sports and still has a successful sporting culture (de Bruijn, 2014).

## 6.7 Chapter summary

The research reviewed here indicates that alcohol companies' sponsorship activities result in young people viewing a large volume of alcohol promotion. There is also evidence to suggest that promotional activities at live sporting events can create an atmosphere that normalises the association between sport and alcohol consumption. Further, advertisements aired during broadcasts of live sporting events consistently violate multiple elements of voluntary international advertising codes, including those specifically designed to protect young people. During televised sporting events, children and adolescents are exposed to a large number of visual references to alcohol, primarily in the form of in-game brand appearances via representation on signage and uniforms. These brand appearances may be effective at creating positive associations between sport and alcohol that operate below people's level of awareness. Some research shows that adolescents and children as young as five are able to accurately connect alcohol sponsors with the relevant sport without prompting. Experimental evidence also shows that exposure to alcohol branding in the form of in-game brand appearances leads to greater familiarity with the brand and positive implicit associations with the particular brand and alcohol more generally. That is, familiarity breeds liking. In addition, exposure to alcohol sponsorship leads to increased alcohol consumption among schoolchildren and alcohol sponsorship may result in higher levels of problematic drinking among young athletes at universities. Alcohol marketers appear to be aware of the unique

benefits of sponsorship, with documentation from alcohol marketing firms showing that sponsorship is viewed as an essential promotional tool because of its ability to harness young people's emotions and permeate youth culture. Common suggestions for change include closing the loophole in Australia that allows alcohol advertisements to be broadcast during children's popular viewing times and increasing the scope of advertising regulations to include sponsorship.

A summary of the quality indicators of all major sports sponsorship findings is displayed in Table 2. This assessment shows that the evidence supporting most of the major findings is of moderate quality and all studies show consistent results. However, the size of the body of evidence across all findings is small. This reflects the relatively new emergence of alcohol sports sponsorship as an area of study compared to traditional media.

*Table 2. Quality assessment rating for major findings relating to sports sponsorship*

Finding	Method	Strength	Size of body of evidence	Sample			Consistency
				Countries	Tested in Australia	Sample age range	
1. Sports sponsorship at the community level common.	- Qualitative (n = 1) - Audit (n = 1)	Moderate Moderate	Small	Some	Yes	NA	Consistent
2. Branding practices at sports events create an atmosphere where alcohol consumption is normalised.	- Qualitative (n = 1) - Quantitative (n = 1)	Moderate Low	Small	One	No	NA	Consistent
3. Alcohol marketers regard sporting events as key arenas to attract youth to brands.	- Qualitative (n = 1)	Moderate	Small	One	No	NA	NA
4. Advertising during commercial breaks of sports programs has a high rate of advertising code violation.	- Content (n = 2)	Moderate	Small	Many	Yes	NA	Consistent
5. There are many visual references to alcohol during televised sporting events.	- Content (n = 5)	Moderate	Small	Many	Yes	NA	Consistent
6. A loophole in advertising restrictions in Australia allowing alcohol advertising during sports programs means children are exposed to a large amount of alcohol advertising on television.	- Exposure (n = 2)	High	Small	One	Yes	Some	Consistent
7. Children are able to correctly match sports teams with their alcohol sponsors.	- Quantitative (n = 2)	Low	Small	One	Yes	Some	Consistent

8. Alcohol sponsorship of community-level sports is associated with increased alcohol consumption among schoolchildren and higher likelihood of engaging in hazardous drinking among sponsored university athletes.	- Review (n = 1, 7)	Moderate	Medium	Many	Yes	Many	Consistent
9. Viewing alcohol branding during sports events increases implicit positive attitudes towards alcohol.	- Quantitative (n = 1)	Moderate	Small	One	No	One	NA

## 7 Digital media

### **Summary of major findings:**

- Alcohol marketers are employing a range of highly sophisticated and novel techniques on social media that serve to normalise alcohol and embed alcohol consumption into young people's social networks and everyday lives.
- Despite evidence to the contrary, young people do not perceive themselves to be influenced by online alcohol promotion.
- Alcohol-related content on social media pages is easily accessed by underage youth.
- There is a link between active engagement with online alcohol promotion and greater consumption of alcohol among young people.
- There is a high rate of alcohol advertising code violation in online advertising.
- Researchers argue that alcohol advertising codes need to be substantially altered to take account of new and sophisticated methods of online alcohol promotion.

### 7.1 Introduction

The rapid proliferation of advertising on the Internet in recent years has fundamentally changed the alcohol promotion landscape. Digital media has become a powerful component of the promotion toolkit for the alcohol industry, providing both a new forum to promote alcohol to youth and an expanded range of advertising tactics. Importantly, the last five years have also seen a significant shift in the digital media landscape from the predominant use of 'dotcom sites', unidirectional websites that facilitate passive viewing of information, to 'Web 2.0', interactive social platforms where users can create and share information (Arora, 2015).

There is evidence to suggest that the alcohol industry has adapted its promotion focus in response to the availability of digital media. A critical review of online alcohol promotion strategies shows that several key players from the alcohol industry have been pioneers in the use of social media for promotional purposes (McCreanor et al., 2013). For example, in 2011 the major alcohol multinational Diageo announced a "multimillion dollar strategic

partnership” with Facebook designed to “drive unprecedented levels of interaction and joint business planning and experimentation” between the two companies (2011). In the same year, Bacardi declared that traditional brand websites are no longer relevant and announced they would direct 90% of their digital media spending to social networking sites (Shearman, 2011). Recent data show that as of 2016, alcohol-branded pages on Facebook have accumulated millions of followers worldwide (e.g., Heineken - 21.6 million, Jack Daniels - 14.5 million, and Budweiser - 13.7 million followers) (Social Bakers, 2016). Given this documented shift to social media, it is important to examine the nature and extent of the use of Web 2.0 as a marketing tool by the alcohol industry to effectively understand how alcohol is currently being promoted.

The shift in focus has been reflected in the academic literature, with the majority of published studies pertaining to online alcohol promotion in the past five years focussing their attention on Web 2.0 rather than dotcom sites (Gupta, Pettigrew, Lam, & Tait, 2016; Lobstein et al., 2016). Therefore, for the purposes of this review, the studies published since 2011 are regarded as the most relevant for analysis. This section of the review addresses literature pertaining to the major strategies of online alcohol promotion, the extent to which youth are exposed to such promotion, and the link between exposure to online alcohol promotion and youth alcohol consumption.

## 7.2 Promotional strategies

Eleven papers were identified that explored the digital media strategies used by alcohol companies. One study examined the use of more traditional dotcom websites while the other studies spanned smartphone apps (software applications designed to run on mobile devices) and the social media platforms Facebook and Twitter.

### 7.2.1 Websites

The one study that examined the use of dotcom websites in the promotion of alcohol involved an audit of the websites of the top ten alcohol brands in the UK across four categories of alcohol (lager, spirits, flavoured alcohol beverages, and cider) (Gordon, 2011b). Of the 40 leading alcohol brands, 27 had a website devoted to promoting their brand. Ten of these sites had a sports section, nine had a music section, 15 had interactive games, 11 contained



downloadable promotional content (e.g., screensavers), three referred to driving or motor racing, and one contained a sexual reference. The author argued that these strategies violated UK self-regulatory codes by linking alcohol with sexual activity, appealing to youth culture, referring to roughness and aggression, and associating alcohol with driving. While this study represents a critical first step in understanding some of the promotional practices employed online by alcohol companies, the subsequent focus in the literature on alcohol promotion conducted on Web 2.0 reflects more recent trends in this area of advertising activity.

### 7.2.2 Apps

Two studies since 2011 have explored the use of smartphone apps for promoting alcohol. Eagle, Dahl, Low, and Mahoney (2014) examined Android and Apple alcohol-related apps and found that the majority of apps were pro-drinking (78%) and variously promoted heavy consumption (e.g., the “Let’s get WASTED! Drinking Game” app), appealed to youth culture (e.g., the “campus beer run” app), and advocated questionable dietary practices (e.g., the “Drink Thin” app that promoted an alcohol-only diet). The authors argued that the apps clearly violate the spirit of alcohol advertising codes. Similarly, Weaver, Horyniak, Jenkinson, Dietze, and Lim (2013) identified and downloaded all apps returned from an alcohol-related keyword search in app stores. Again, many apps were pro-alcohol. Fifty percent were classed as entertainment apps that endorsed drinking through drink recipes, drinking games, and bar locaters. Apps designed to test blood alcohol content comprised 39% of the apps (which were found to be highly unreliable at estimating blood alcohol content). Eleven percent of the apps were related to health promotion, half of which provided information about the negative effects of alcohol and half provided motivational methods to reduce or stop drinking.

### 7.2.3 Social media

In recent years, social networking sites have become an integral and ubiquitous part of young people’s social lives (Australian Bureau of Statistics (ABS), 2016). Alcohol brands are exploiting this phenomenon by investing significant resources into their social media presence (Bennet, 2016). Eight studies were identified that examined alcohol promotion tactics on social media. These studies generally employed content analyses to systematically and critically examine the promotional practices evident on alcohol-branded Facebook pages and Twitter accounts. Some of the studies also used focus groups or interviews with young

social media users to examine their perceptions of their online interactions with alcohol brands. The studies produced similar findings that are synthesised below. For the most part, the evidence indicates that alcohol companies employ various methods of initiating interactions and engagement with users who have followed or ‘liked’ their brand pages by:

- (i) prompting conversations that link alcohol to time-, date- and day-specific events;
- (ii) creating ‘activations’ with cultural events; and
- (iii) co-creating youth identities through their brand ‘personalities’.

Importantly, social media users become actively involved in creating and sharing branded content across their social networks.

Three studies documented how alcohol brands use social media to engage with users in real time by posting time-, day-, and event-specific posts (Carah, 2014; Lim, Hare, Carrotte, & Dietze, 2016; Nicholls, 2012). Companies were found to strategically time their posts to precede and coincide with common drinking times such as evenings and weekends. Carah (2014) found that the highest number of posts on branded Facebook pages occurred between 3pm and 5pm on Fridays. Alcohol marketers also employed other day-specific tactics such as posting comments on Mondays to elicit memories from weekend drinking, on Wednesdays to lament the middle of the week, and on Thursdays to arouse anticipation for drinking on Friday. Marketers also attempted to normalise the consumption of alcohol on weekdays (e.g. “Mojito Mondays”) (Carah, 2014; Nicholls, 2012). Furthermore, brands associated themselves with key public holidays by posting advertising content in the lead up to, during, and after such events (Carah, 2014; Nicholls, 2012). These techniques are argued to integrate alcohol brands into both special occasions and into people’s normal, everyday lives (Carah, 2014).

Another common tactic used by alcohol marketers is to leverage real-world branding activities online. Using a combination of quantitative content analysis and qualitative analysis, four studies documented the use of ‘activations’ – that is, real-world installations with which social media users are encouraged to interact (Atkinson, Ross-Houle, Begley, & Sumnall, 2016; Carah, 2014; Lim et al., 2016; Nicholls, 2012). For example, employing content analysis of Facebook pages, Carah (2014) documented a manifestation of this tactic that involves the creation of elaborate, brand-themed bars, often situated at key youth cultural events such as music festivals or sports events. One such venue was a Jagermeister-themed

bar at a popular winter music festival in Australia. The bar was promoted with a Germanic, hunting-lodge theme and was decked out with moose-heads, fireplaces, and dark-wood furniture. The Facebook photos showed that the bar served new combinations of Jagermeister mixed-drinks and became a place for late-night socialising and partying once the major festival performances were finished (Carah, 2014). At events such as these, alcohol brands employ promotional staff to take photos that are uploaded to social media and encourage attendees to interact with the brand online by using their smartphones to ‘check in’, post status updates, and upload their own photos. Alcohol-branded posts are then distributed by the users to the news feeds of their peer networks. These practices serve to blur the lines between branded content and user-generated content. This is a critical development in alcohol promotion. Researchers have noted that by prompting online user engagement with the event, the benefits of sponsoring cultural events is compounded because branded images are organically disseminated by the users themselves (Carah, 2014; Lim et al., 2016; Nicholls, 2012). Studies also demonstrate that brand activations can be used to produce media content that circumvents alcohol advertising regulations. For example, a critical analysis of alcohol-branded Facebook activity conducted by Brodmerkel and Carah (2013) suggested that the pictures uploaded by youth at branded installations and events depict people under the age of 25 years consuming alcohol and therefore arguably link alcohol consumption with social success.

Three online content analyses found that alcohol marketers may use social media to produce distinctive brand personalities that are then used to engage with online identity-forming practices of youth (Carah, 2014; Carah, Brodmerkel, & Hernandez, 2014; Purves et al., 2014). Rather than communicate the brand identity directly to consumers through a one-way process as in traditional media, posts are uploaded that encourage users to co-create the brand identity by engaging in prompted discussions. This is often in the form of content appropriated from youth Internet-culture (such as memes, viral videos, images, and jokes) and references to particular cultural pastimes or lifestyles. Brands also prompt discussions around key identity markers such as gender. Using qualitative content analysis of Facebook pages, Carah (2014) documented multiple instances where brands with predominantly male consumers initiated conversations among their fans about male rituals and national identities (e.g., “Besides VB, what’s the next essential for a great Australia Day BBQ?”). This example of prompted discussion led to instances of sexist and demeaning comments toward women without the company-generated messages ever explicitly linking the brand to such identities

or cultural practices. To elicit these responses from users, the author argued that the brands rely on a shared knowledge of masculine norms and a tacit understanding of the brand personality from a history of television advertising, which are then built on and exaggerated by social media users (Carah et al., 2014).

The use of branded identity-making practices online has been further supported in studies of youth perceptions of alcohol promotion on social media. By comparing the results of focus groups with adolescents to a content analysis of alcohol-branded social media content, Purves and colleagues (2014) were able to demonstrate that brands are successfully creating recognisable brand ‘personalities’. In the focus groups, underage social media users correctly associated brands with the personalities and values promulgated online by the brands themselves. The adolescents also reported co-opting the brand personalities and values to convey their own personality to gain social status and identity benefits.

Researchers have also examined the extent to which young people are able to recognise the promotional strategies employed by alcohol companies. Two studies involved focus group discussions about social media use and alcohol advertising with adolescents in the UK (Atkinson et al., 2016; Atkinson, Ross, Begley, & Sumnall, 2014). The results showed that many of the participating adolescents were highly knowledgeable about online advertising practices and spoke of interacting often with online promotional content. However, they typically attempted to distance themselves from the idea of being affected by these promotional practices through a discourse of ‘maturity’; they expressed the belief that only those younger than themselves (i.e., younger children) are influenced by online advertising.

In a related line of research, two studies systematically compared the use of social media by alcohol companies and health promotion agencies (Burton, Dadich, & Soboleva, 2013; Lim et al., 2016). Lim, Hare, Carrotte, and Dietze (2016) found that while overall the strategies used by alcohol companies and health promotion organisations were quite similar (e.g., posting visually appealing content), the use of time- and day-specific posts was more common on alcohol-related Facebook pages than on health promotion pages. Similarly, Burton, Dadich, and Soboleva (2013) compared the use of Twitter accounts by alcohol companies and health promotion organisations. Alcohol brands also demonstrated a more sophisticated and integrative use of Twitter (such as the use of hashtags), leading to greater interactivity and influence than pro-health Twitter activity. Alcohol-branded pages tended to

be followed by more people than the health promotion pages, and their tweets were more likely to be forwarded to others.

#### 7.2.4 Summary

The majority of the studies outlined above focussed on the tactics employed by alcohol companies on social media to promote alcohol consumption to young people. These tactics go beyond traditional promotion methods by purposively harnessing user-generated content to subtly integrate brands into the milieu of youth. Some of the identified tactics used include (1) embedding brands in key youth events, (2) creating brand ‘personalities’ that are then reproduced and used by youth as part of their identity construction, and (3) prompting conversations and providing real-time drinking suggestions to represent alcohol consumption as a routine and normal part of everyday life. Importantly, studies of youth perceptions of online promotional practices reveal that some young people do not perceive themselves to be influenced by these tactics. Furthermore, studies that compare the tactics of alcohol companies with the tactics employed by health promotion organisations suggest that alcohol companies are more effective in harnessing the integrative nature of social media.

### 7.3 Volume and exposure

Given the sophisticated use of online promotion by the alcohol industry, it is important to examine the extent to which youth are exposed to this form of marketing activity. A first step is to determine the extent to which youth use the Internet and social media. In Australia, adolescents aged 15-17 years have a near universal rate of Internet use (99%), they most commonly go online for social networking (91% of visits), and they spend the highest mean number of hours per week on the Internet compared to all other age brackets (18 hours) (ABS, 2016). Therefore, the Internet generally, and social media in particular, is heavily trafficked by youth.

While the above data attest to the widespread use of the Internet by adolescents, quantifying youth exposure to online alcohol promotion presents a significant challenge. Given that the Internet is a largely unregulated, dynamic, and international entity, methodologies used in the study of youth exposure to traditional media are not feasible. Previous studies of exposure to traditional media have relied on content delivered via fixed schedules that are publicly

available, allowing for accurate estimates of youth exposure to advertising. By comparison, estimates of Internet exposure must take into account the highly targeted and individualised marketing model of Web 2.0. Social media platforms are able to collect extensive data about individuals, such as demographics, location, peer networks, and interests, and then use these data to deliver tailored advertising that is relevant to the individual. Therefore, people can only see the advertising that is targeted to them and are unable to view advertising targeting other demographic groups. Unfortunately, demographic data relating to users' online interaction with alcohol brand pages are owned by social media platforms and alcohol companies and are currently not available for purchase (Jernigan & Rushman, 2014).

Another common method for estimating the extent of youth exposure to alcohol promotion is tracking the amount spent on advertising. However, overall organisational or industry advertising expenditure is an unreliable marker of the extent of digital promotion, which is just one form of advertising. Social media is a much less expensive channel than traditional media, so it can be difficult to meaningfully compare ad-spend in this area to ad-spend in traditional media (Jernigan & Rushman, 2014). Furthermore, brand-generated content is often distributed by users through their social networks, leading to the free promotion of brands (Jernigan & Rushman, 2014).

For these reasons, measuring volume of and exposure to online alcohol advertising is a challenging area of investigation. Below, the limited available literature on youth exposure to online alcohol promotion is reviewed. Reflecting the acknowledged measurement difficulties, most of this work focuses on a necessary precursor to exposure - access. Five studies evaluated the use of age-gating by websites and social media platforms to determine whether these controls are effective in preventing youth from accessing alcohol-related content. Two studies examined the number of alcohol-branded social media sites and the amount of user interaction with these sites. Unfortunately, no studies were able to ascertain the proportion of youth interacting with alcohol-related content online. This therefore constitutes an important focus for future alcohol advertising exposure research.

### 7.3.1 Access

#### 7.3.1.1 Websites

One study was identified that examined whether youth are able to access alcohol-branded websites. Jones, Thom, Davoren, and Barrie (2014) assessed the effectiveness of alcohol marketers' age-gating practices for preventing underage youth from accessing their websites. They sampled a range of alcohol sites of brands popular among Australian youth. Half of the sites had age-filters, but these were found to be 'tokenistic' because children could easily circumvent questions asking about their age by entering false information. In addition, on all sites with an age-filter it was possible for individuals to 'try again' with a different age once access had been initially denied.

#### 7.3.1.2 Social media

In this section, the results of a review of age restriction policies for three of the most commonly used social media sites are summarised. These policies are important because they show the extent to which youth are able to access alcohol-related content online. Three studies are then described that explicitly tested whether youth are able to access alcohol-related content on smartphone apps and the social media sites YouTube, Twitter, and Instagram.

Jernigan and Rushman (2014) provided a useful summary of the age-restriction policies of social media giants Facebook, YouTube, and Twitter. They found that Facebook requested a date of birth when individuals created an account. In order to interact with an official alcohol brand page on Facebook, the user's Facebook age had to be above the legal drinking age of the given country. Furthermore, users above the legal drinking age were unable to share age-restricted Facebook content with underage users. However, there was nothing to stop users signing up to Facebook with false information. Indeed, there is evidence indicating that there may be millions of users who sign up to Facebook using false ages, including many children under the age of 13 (which is the minimum age required to create a Facebook account) (*That Facebook Friend Might Be 10 Years Old*, 2011). Twitter did not require age verification during account creation. Rather, age-restricted profiles, such as alcohol-branded profiles, used an age-verification process that involved asking users to enter their birthdate when they wanted to follow and interact with brands. This process did not use an external validation procedure, meaning that youth would be able to gain access if they provide a false age

(Jernigan & Rushman, 2014). Furthermore, if users did not choose to explicitly ‘follow’ the brand, all content was accessible by simply visiting the brand’s Twitter page. YouTube required individuals to enter their birthdate when they created an account. For those who subscribed to alcohol-branded accounts (also known as ‘channels’), alcohol-branded content was restricted for people who reported their age as under the legal drinking age. However, similar to Twitter, if the user was not signed into an account, alcohol-branded videos were easily accessible. Therefore, the evidence suggests that, with varying degrees of effort, online alcohol promotional content is accessible to adolescents and children via social media (Jernigan & Rushman, 2014).

Three studies involved experimental testing of whether underage users can access alcohol-related content on social networking sites and apps. Barry and colleagues (2015) investigated whether alcohol companies are implementing self-imposed regulations to prevent youth exposure to online advertising in the US. YouTube profiles were created, assigned the ages of 14, 17, and 19 years, and then used to attempt access to alcohol-sponsored accounts of 16 alcohol brands with the highest prevalence of past 30 day underage alcohol use. Every underage profile was able to successfully subscribe to all 16 channels, and the videos on two-thirds of these channels were able to be viewed. In a similar vein, Barry and colleagues (2016) created fictitious underage profiles on Twitter and Instagram (ages 13, 15, 17, 19, and 21 years) to examine whether underage youth could interact with advertising content, follow alcohol brands, or directly receive promotional updates generated by alcohol brands. The use of age-gates on Twitter appeared to be effective. The underage profiles were prevented from following alcohol brand pages and therefore did not receive updates and promotions. In contrast, Instagram appeared to be entirely unregulated. All underage profiles were able to follow all alcohol brand pages. Remarkably, the authors also found that administrators on Instagram would actually directly interact with and respond to posts made by underage profiles. Finally, Eagle and colleagues (2014) examined access to alcohol-related apps accessible to Android and iPhone users in Australia. There were no age restrictions on any of the 221 pro-alcohol apps identified.

### 7.3.2 Interactivity

There is very little work that quantifies youth exposure to online alcohol advertising practices. Two studies were identified that measured the number of alcohol-branded pages on



Facebook and the extent of user interaction with these pages. Unfortunately, both studies were unable to access data relating to the percentage of youth exposed to the Facebook pages. Nhean and colleagues (2014) conducted a systematic Internet search to identify the number of alcohol-brand Facebook pages in the US. In total, 1017 company-sponsored alcohol-brand pages were identified, of which beer brands had the greatest number (230), followed by wine (211), and then vodka (204). Individual brands with the most pages were Smirnoff (52), Johnnie Walker (48), Absolut (36), and New Belgium (27). Brands subsumed under the company Diageo had the highest number of brand pages. Given that this study was conducted in 2012, the number of alcohol Facebook pages is likely to have increased.

Jernigan and Rushman (2014) analysed the extent of user engagement with alcohol advertising on Facebook pages for 15 alcohol brands with the highest consumption rates among youth in the US. First manually, and then using a program called “CrowdTangle Discovery App” to provide an automated measurement, the researchers tracked alcohol-brand Facebook activity from 2009 to 2013. As of January 2012, the alcohol-branded pages had accumulated 15 million fans and generated 172 million impressions (e.g., “likes”, “shares”, “comments”) on Facebook. User engagement with brands started to rapidly increase in 2011, with this rate of increase continuing until the end date of the study.

### 7.3.3 Summary

Alcohol promotion online is widely accessible to underage youth. All social networking sites and apps investigated by various research groups were able to be accessed by underage youth with varying levels of ease. Facebook restricts alcohol content to underage youth but it is possible to create an account on Facebook using a false age. YouTube and Twitter restrict alcohol content to underage users when signed into their accounts, however alcohol advertising content is able to be accessed by underage youth when not signed into accounts. Instagram appears to be the least restrictive social networking platform of those studied, with alcohol pages able to be readily accessed and followed by underage youth. Furthermore, all pro-alcohol apps available to users in Australia could be accessed by underage youth.

Overall, there is little available evidence relating to youth exposure to online alcohol advertising. Two studies took some first steps in measuring potential exposure. One study systematically tracked the number of alcohol brand Facebook pages and found that alcohol-

related Facebook pages have large numbers of followers. The second study measured user interaction with alcohol-branded pages on Facebook, with the results suggesting a high and rising level of interactivity, although it is impossible to determine the proportion of youth accessing these pages. Unfortunately, there is currently no reliable method of measuring the demographics of traffic on alcohol-related social media pages. Therefore, while youth exposure to alcohol advertising online is likely to be very high, further research is required to determine the extent of this exposure.

## 7.4 Link between exposure and consumption

It is also important to investigate the extent to which exposure to online promotion influences alcohol consumption among youth. Six studies were identified that examined the link between exposure to online alcohol promotion and alcohol-related beliefs and behaviours. These consisted of five cross-sectional studies and one longitudinal study, each of which is described below.

The cross-sectional studies typically distinguished between *passive exposure* to online alcohol promotion, such as viewing an alcohol advertisement online, and *active engagement*, such as liking or commenting on alcohol-branded social media pages. Hoffman, Pinkleton, Weintraub Austin, and Reyes-Velázquez (2014) found that while the use of social media per se among US university students (average age 21 years) was not associated with alcohol consumption, those who actively engaged with alcohol-related content on social media had higher rates of alcohol consumption and were more likely to engage in risky alcohol behaviours. Similarly, Jones and colleagues (2016) conducted a survey of 283 Australians aged 16-24 years to examine the relationship between Facebook use and the extent of alcohol consumption and problematic alcohol use. Active engagement with but not passive exposure to alcohol promotion on Facebook was associated with greater alcohol consumption. Carrotte and colleagues (2016) surveyed a convenience sample of 1,001 Australians aged 15-29 years to examine the link between liking or following an alcohol social media page and increased alcohol consumption. They found that engaging with alcohol promotion on social media was associated with a greater likelihood of engaging in high-risk patterns of alcohol consumption.

Critchlow and colleagues (2015) examined whether awareness of and engagement with alcohol digital promotion influenced the likelihood of heavy episodic drinking. An online

survey of 405 young adults aged 18-25 years demonstrated that on average young people were aware of six digital alcohol-promotion channels and engaged with an average of two channels. Greater awareness of and engagement with online alcohol advertising was associated with increased prevalence of heavy episodic drinking. Finally, de Bruijn and colleagues (2016) conducted a survey of 9,038 European students from Germany, Italy, the Netherlands, and Poland, with an average age of 14 years. Across all four countries, exposure to online alcohol promotion was associated with drinking initiation and binge drinking in the past 30 days. Once again, active engagement with online promotion showed a stronger relationship with the assessed drinking outcomes compared to passive exposure to online advertising.

In the one identified longitudinal study, McClure and colleagues (2016) examined associations between self-reported youth engagement with online alcohol promotion and alcohol use in the US. A sample of 1734 youth aged 15-20 years reported their baseline alcohol advertising receptivity (a cumulative measure including number of positive responses to seeing alcohol advertising on the Internet, visiting alcohol brand websites, being a fan of an alcohol-branded page, and cued recall of alcohol brand website images) and whether they had ever drunk or engaged in binge drinking at one year follow up. Higher levels of online alcohol promotion receptivity were associated with subsequent binge drinking. This study was conducted in 2011, which was around the time when online social media marketing began to grow rapidly. As such, further longitudinal studies are required to identify more recent trends.

#### 7.4.1 Summary

The existing evidence converges to demonstrate that active engagement with alcohol brands online, rather than social media use in general or passive exposure to online promotion, is associated with higher alcohol use and problematic drinking behaviours among adolescents and young adults. Most available data in this space are cross-sectional in nature and are therefore limited to describing the link between exposure and consumption rather than the influence of exposure on consumption. While only a small body of evidence was identified, these studies are congruent with an extensive body of work relating to traditional advertising that consistently finds a significant association between exposure to alcohol promotion and alcohol consumption among young people.

## 7.5 Code violations

Two studies were identified that explicitly asked people to report their perceptions of whether online alcohol advertising violates Australian advertising codes. In a cross-sectional study, Weaver, Wright, Dietze, and Lim (2016) surveyed groups of young Australians aged 16-29 years to investigate the perceived themes in online alcohol advertisements in the form of banner or pop-up advertising (rather than branded social media pages). Responses to open-ended questions revealed that the most common themes identified in advertising were related to social success. When asked to rate the advertisements in reference to the ABAC code, participants perceived the advertisements to be suggesting that alcohol leads to relaxation (67%), improved mood (65%), social success (57%), and confidence (49%), all of which are in violation of the ABAC code. Jones, Robinson, Barrie, and Davroen (2013) examined the content of the Facebook pages of 12 alcohol brands to assess whether they were in violation of the ABAC code. All pages were found to be in breach of at least one aspect of the code. The most common breaches related to the following code provisions: “1(a) mature, balanced and responsible approach to consumption of alcohol; 1(b) appeal to children or adolescents; and 1(c) suggest consumption or presence of alcohol beverages as a cause of or contributing to a significant change in mood or environment” (p.2). Therefore, the results of these studies suggest both researchers and young people perceive themes in online alcohol advertising to be in violation of industry codes.

## 7.6 Implications for regulation

Digital media presents significant challenges for the effective regulation of alcohol promotion. Researchers have argued that the current codes for regulating alcohol use are insufficient for the regulation of digital media (Brodmerkel & Carah, 2013; Purves et al., 2014). There have, however, been some efforts to incorporate digital media into the current regulatory codes. In September 2012, a ruling was made by the Australian Advertising Standards Bureau (ASB) stating that “(i) a brand’s Facebook page is a marketing communication tool, and (ii) all contents on the page fall under the industry’s self-regulatory code of ethics, including consumer-created content such as user-generated comments and photos”. However, the ASB Board of Directors includes members of the advertising industry and rulings by this body are not enforceable by law. Similar changes have also been made to

voluntary regulatory codes in other Western nations. Brodmerkl and Carah (2013) argue that simply extending existing guidelines to encompass digital media overlooks the unique regulatory challenges presented by online alcohol promotion. This is because current codes focus on the 'content' of advertising, which fails to address the sheer volume of online promotion, the context of the advertising (primarily within young people's social networks), and tactics that integrate alcohol branding into young people's everyday lives and identities. Meanwhile, some sections of the alcohol industry argue that such practices occur organically, are not within their control, and have no commercial intent (Brodmerkel & Carah, 2013). In any case, given that studies have consistently demonstrated that self-regulated codes pertaining to traditional media are ineffective (Noel & Babor, 2016), the capacity for these same codes to be effective in the digital realm is doubtful. Therefore, a significant overhaul of the current system may be required to take account of the embedded nature of online promotion tactics.

The current model of regulation in which the onus is on consumers to report problematic content to regulatory bodies is also undermined by digital media practices. The dynamic, transitory, and individualised nature of digital promotion means that the ability for consumers to identify and report problematic content within a useful timeframe is limited (Brodmerkel & Carah, 2013). By the time the content is reported to the relevant regulatory body, it has likely already spread through social networks and may no longer exist. Furthermore, given that online alcohol promotion is cleverly integrated into cultural practices and social spaces, consumers may not even recognise it to be advertising and therefore fail to report it (Australian Medical Association, 2012; Brodmerkel & Carah, 2013).

As noted above, another area that is in need of regulation is the sheer volume of alcohol-related content to which young people are likely exposed online. Unfortunately, methods for determining the extent of youth exposure are currently inadequate. It can only be inferred that youth are disproportionately exposed to alcohol promotion online because they are heavy users of social media. This is in contrast to the highly detailed data that can be amassed by Facebook and alcohol brands to track the extent of youth exposure and interaction with alcohol brands online (Jernigan & Rushman, 2014). Unfortunately, such data are proprietary and are therefore not disclosed to the public. Gaining accurate estimates of youth exposure is further thwarted by the many users who sign up using a false age. Therefore, regulatory options may be informed by improved measures of the extent of youth exposure. Some

suggest that future legislation should enforce full disclosure from alcohol marketers and/or social media platforms on the extent of youth engagement with alcohol-branded social media pages (Brodmerkel & Carah, 2013; Lobstein et al., 2016).

The ability of youth to actively access alcohol promotion online is also problematic. Studies repeatedly show that age-gating is either unenforced or non-existent. It is still an open question whether the responsibility lies on the part of social media organisations or the individual user. It has been suggested that it may be possible to draw on publicly available databases to determine the age of a person trying to access the content, however such an avenue raises significant privacy issues (Jernigan & Rushman, 2014). Another perspective is that if age-gates are ineffective, then it may be inappropriate for alcohol to be promoted online at all (Hastings & Sheron, 2013).

## 7.7 Chapter summary

Alcohol promotion on digital media is “simultaneously more powerful and less controlled” than traditional media (Hastings & Sheron, 2013, p. 2). Not only does the Internet increase the extent of exposure by providing a novel channel that is frequented by young people, it allows for highly sophisticated methods to promote alcohol consumption. Alcohol companies are employing promotional techniques that capitalise on the increasingly interactive and mobile nature of social media to normalise alcohol and embed alcohol into the everyday lives and identities of young people. Research further shows that alcohol-related content on social media pages is easily accessed by underage youth. Finally, there is a link between active engagement with online alcohol promotion and heavier consumption of alcohol among young people. Researchers have argued that regulations need to be substantially altered to take account of the sophisticated techniques employed online by alcohol marketers.

The quality assessment of digital media studies is shown in Table 3. On the whole, the quality of evidence in this area was rated as being of moderate quality and was based on a relatively small number of studies. However, all major findings were rated as consistent across studies, and they are aligned with the outcomes of studies reported in previous chapters.

**Table 3. Quality assessment rating for digital media studies**

Finding	Method	Strength	Size of body of evidence	Sample			Consistency
				Countries	Conducted in Australia	Sample age range	
1. Alcohol promotion online harnesses novel features of social media to integrate brands into spaces and practices of youth.	- Qualitative (n = 4) - Content (n = 2)	Moderate Moderate	Medium	Some	Yes	NA	Consistent
2. Young people do not perceive themselves to be influenced by online promotion.	- Qualitative (n = 2)	Moderate	Small	One	No	Some	Consistent
2. Limited controls are in place to prevent youth from accessing online alcohol promotion.	- Access (n = 4) - Critical review (n = 1)	Moderate Low	Small	Some	Yes	NA	Consistent
3. There is high and rising interactivity with alcohol brands on Facebook.	- Audit (n = 2)	Low-Moderate	Small	One	No	NA	Consistent
4. Active engagement with online alcohol promotion leads to greater alcohol consumption among young people.	- Quantitative (n = 6)	Low-Moderate	Medium	Many	Yes	Some	Consistent
5. There is a high rate of alcohol advertising code violation in online advertising.	- Content (n = 2)	Moderate	Small	One	Yes	NA	Consistent

## 8 Other types of promotion

### Summary of major findings:

- Ownership of alcohol-branded merchandise by young people has a strong relationship with heavier alcohol consumption and is associated with earlier initiation of drinking.
- There is some evidence that Australian parents may not have considered the potential impacts of alcohol-branded merchandise on children, but can be concerned once made aware.
- Point-of-sale promotions are common in Australia and lead young adults to purchase larger quantities of alcohol.
- Responsible drinking campaigns designed by the alcohol industry are ambiguous and may reinforce social norms around binge drinking.
- Corporate social responsibility practices by the alcohol industry appear to have marketing benefits.

### 8.1 Introduction

Several common methods of alcohol promotion are not captured by the forms of media covered above. These include alcohol-branded merchandise, point-of-sale promotions, and corporate social responsibility activities. Research pertaining to these methods of alcohol promotion is reviewed below. A summary of the quality assessment ratings for these areas of research is displayed in Table 4.

### 8.2 Alcohol-branded merchandise

Alcohol-branded merchandise is a form of promotion whereby products such as clothing, gadgets, food, and novelty items are labelled with the logo of an alcohol brand. Rather than necessarily leading to immediate sales, branded merchandise is seen as a way to build brand allegiance with current and future consumers (Jones, 2016). Because people can carry, use, or wear the merchandise, it has the potential to be used by owners to signal aspects of their identity or group membership (Jones, 2016). Furthermore, the products often have a long



shelf-life, which facilitates frequent and ongoing exposure (Casswell, 2004; Lin, Caswell, You, & Huckle, 2012).

A recent major systematic review has summarised research published in English-language journals relating to the link between ownership of alcohol-branded merchandise and alcohol consumption among children, adolescents, and young adults (Jones, 2016). In this review, nine cross-sectional and four longitudinal studies were identified that were published from 2003 to 2016. Across the studies, the prevalence of alcohol-branded merchandise ownership ranged from 11-59%, with males typically owning more merchandise than females. All nine cross-sectional studies found a positive association between ownership of alcohol-branded merchandise and higher alcohol consumption (odds ratios ranging from 1.5 to 3.3). Similarly, all four longitudinal studies reported a positive association between ownership of alcohol-branded merchandise at baseline and drinking initiation at follow up (odds ratios ranging from 1.4 and 1.8). Furthermore, the longitudinal studies that simultaneously examined other types of promotion found that alcohol-branded merchandise demonstrated much stronger effects on alcohol consumption than the other types of promotion that included advertisements with a sports theme and magazine and radio advertising. Given that alcohol-branded merchandise is currently an unregulated form of promotion in Australia, it has been suggested that measures should be taken to restrict both where alcohol-branded merchandise can be distributed and the forms in which it can appear (i.e., restrict forms with evident appeal to children, such as toys) (Jones, 2016).

Taking a different approach, one study used focus groups to explore Australian parents' perceptions of alcohol-branded merchandise (Jones, Andrews, & Caputi, 2014). Most of the parents were aware of alcohol-branded merchandise, but many had not considered the potential influence of the merchandise on their children's alcohol-related beliefs and behaviours. Upon reflection, many of the parents started to acknowledge that the merchandise is a form of advertising that may influence their children. Given that prior to the study these parents were largely disengaged or unaware of the impacts of alcohol-branded merchandise, the authors argued that steps should be taken to raise awareness among parents.

### 8.3 Point-of-sale promotions

Point-of-sale promotion refers to advertising and other forms of sales strategies that occur at the place where the purchase will be made, such as bottle-shops or pubs (Jones & Smith, 2011). Point-of-sale promotions can include price promotions, such as ‘buy one get one free’, or non-price promotions, such as the chance to enter a competition.

One study involved an audit of point-of-sale alcohol promotions in 24 alcohol outlets in Sydney and Perth (Jones, Barrie, Robinson, Allsop, & Chikritzhs, 2012). There was an average of 33 promotions per outlet, with over half of these being non-price promotions (such as competitions and giveaways) that required a large quantity of alcohol to be purchased. The average number of standard drinks required to participate in a given promotion was just under 19. Supermarket chain outlets had the most promotions overall, more price-based promotions, and required purchase of a greater quantity of alcohol compared to other types of outlets.

Three studies since 2011 were identified that examined whether young adults recall and are influenced by point-of-sale promotions when purchasing alcohol at bottle-shops (Jones, Barrie, Gregory, Allsop, & Chikritzhs, 2015; Jones & Smith, 2011; Pettigrew et al., 2015). The first study involved focus groups of young people aged 16-25 years to explore their perceptions of point-of-sale promotions involving price or volume discounts (Jones & Smith, 2011). Most of the participants clearly remembered point-of-sale promotions and reported having bought more alcohol on a purchase occasion because of promotions. In a similar study, Pettigrew and colleagues (2015) used a combination of interviews, focus groups, and emailed narratives to explore how in-store shopping experiences and sales promotions are relevant to the alcohol choices of 18-21 year old drinkers. They found that in-store promotions can impact the type and quantity of alcohol purchased by young people and that sales staff at the stores often encouraged young people to take advantage of these promotions. Finally, in a study conducted by Jones, Barrie, Gregory, Allsop, and Chikritzhs (2015), 509 young adults were interviewed outside bottle-shops in Sydney after having purchased alcohol. Of those interviewed, 26% indicated that a promotion had influenced their purchase. Those who participated in point-of-sale promotions purchased a significantly greater quantity of alcohol compared to those who did not participate (Jones et al., 2015). In sum, from the available evidence it seems that young people both recall and are influenced by point-of-sale promotions, leading them to purchase larger amounts of alcohol.

## 8.4 Corporate social responsibility

Corporate social responsibility (CSR) refers to activities undertaken by companies that are ostensibly designed to promote public good and minimise any harms caused by their products (Clapp & Rowlands, 2014). However, CSR is a well-known marketing strategy and is designed to maintain or increase sales in the long-term by managing stakeholder perceptions of the company (Fooks, Gilmore, Collin, Holden, & Lee, 2013). CSR activities have long been employed by the alcohol industry, and there is evidence to suggest that such practices have become more common in the past five years, particularly among transnational brands (Pantani et al., 2016). These practices may serve the interests of the alcohol industry by promoting alcohol brands and improving public perceptions of the alcohol industry, while simultaneously working to deflect responsibility for alcohol-related harms away from the industry. Below is a review of recent research into the marketing potential of corporate social responsibility practices.

One major corporate social responsibility practice often implemented by alcohol companies is the establishment of alcohol-industry funded social aspects and public relations organisations (SAPROs) that have the stated aim of reducing alcohol-related harms in the community (Miller, de Groot, McKenzie, & Droste, 2011). For example, in Australia the DrinkWise organisation was established in Australia in 2005 with the stated purpose to “maximise any benefits and minimise the harm from alcohol consumption” (DrinkWise, 2006). This organisation is now among more than 40 alcohol-related SAPROs that operate in over 27 countries (Babor & Robaina, 2013). A common practice of these organisations is to lobby against population-wide harm-reduction measures, such as taxation, and to instead recommend and deploy educational advertising campaigns that encourage ‘responsible drinking’, particularly among young people (Jones, Wyatt, & Daube, 2016; Miller et al., 2011).

One recent campaign produced by DrinkWise called “How to Drink Properly” drew considerable controversy and criticism upon its release and has been the subject of recent analyses and discussion (Jones, Wyatt, et al., 2016; Pettigrew, Biagioni, Daube, et al., 2016). Briefly, the advertisement depicted an animated, debonair, James Bond-type character who speaks directly to the camera about the line between acceptable and unacceptable forms of

drinking. Holding a martini glass, and then after that a beer bottle, he states that at first alcohol can make you feel “*very, very attractive, for a time. This is what we call the realm of drinking excellence*”, but then some people can descend into the less desirable stage of drinking where they become “*shitfaced*” and are described as “*amateurs*”. Researchers have argued that, consistent with past research on responsible drinking campaigns (Barry & Goodson, 2010; S. Smith, Atkin, & Roznowski, 2006), the “How to Drink Properly” campaign paints drinking as something sophisticated and glamorous and is ambiguous on the topic of how much alcohol is too much – leaving this judgement to the discretion of the viewer (Jones, Wyatt, et al., 2016; Pettigrew, Biagioni, Daube, et al., 2016). In a critical review of industry activity in this area, Jones, Wyatt and colleagues (2016) noted that by depicting characters who vomit and fall over as “*amateurs*”, it seems that the advertisement is discouraging being unable to hold one’s drink, rather than drinking as such. This interpretation was supported by a recent qualitative study by Pettigrew and colleagues (2016) in which 48 drinkers aged 18-21 years shared their interpretations of the “How to Drink Properly” campaign. Most of the participants did not personally identify with the characters exhibiting negative forms of drinking, despite being high-risk drinkers themselves. Very few of the study participants perceived that they needed to alter their own drinking behaviours. Instead, many reported liking the advertisement because it was entertaining and believed that it confirmed existing social norms around heavy drinking.

Another major CSR tactic involves alcohol companies partnering with charities to raise funds for social causes. This is typically achieved by donating a proportion of profits from a given alcohol product to the partner charity. Researchers have argued that this practice may be a cause for concern given evidence that alcohol companies support health-related causes where alcohol actually contributes to the health condition being addressed (Jones, Wyatt, et al., 2016). For example, Mart and Giesbrecht (2015) documented the considerable number of alcohol products tied to breast cancer charities, which is at odds with the increasing evidence that alcohol is a risk factor for the development of breast cancer. While such campaigns may lead to a considerable amount of money being donated to the cause at hand, this comes at the cost of potential harm among those consuming the product. Furthermore, this form of CSR activity may serve to down-play the link between alcohol and various health conditions (Jones, Wyatt, et al., 2016).

One study systematically examined CSR practices in Latin America and the Caribbean (Pantani et al., 2016). Public health researchers rated 218 CSR activities according to whether they have marketing potential, which was defined as the existence of direct evidence that they are being used to promote alcohol brands and products (e.g., the addition of a brand logo to materials distributed to encourage responsible drinking), rather than indirect evidence (e.g., attempting to improve reputation by funding of school-based education programs). The researchers found that over half of the assessed CSR activities were deemed to have marketing potential, and those practices with marketing potential were more likely to reach a large audience compared to activities deemed to be without marketing potential (Pantani et al., 2016).

In sum, growing evidence suggests that CSR practices may be a form of promotion that serves to protect the interests of the alcohol industry. Two major CSR promotional practices were identified. The first is responsible drinking campaigns developed by the alcohol industry, which have been found to present ambiguous messages about how much is an appropriate amount to drink and to bolster existing norms around heavy drinking. The second CSR approach is to link alcohol products with socially responsible causes to promote a positive image to the public while promoting products that may be linked to these health problems. Finally, one study systematically analysed a range of CSR practices in South America and found that over half of the practices could be viewed as having the potential to sell products and brands. Given the evidence reported here, many researchers suggest that CSR promotional activities should be called into question by governments and potentially regulated (Babor & Robaina, 2013; Jones, Wyatt, et al., 2016; Pantani et al., 2016; Pettigrew, Biagioni, Daube, et al., 2016).

*Table 4. Quality assessment rating for other media*

	Finding	Method	Quality	Size of body of evidence	Sample			Consistency
					Countries	Tested in Australia	Sample age range	
<b>Alcohol-Branded Merchandise</b>	1. Ownership of alcohol-branded merchandise by youth has a strong relationship with higher alcohol consumption, and is associated with earlier initiation of drinking.	- Review (n = 1, 13)	Moderate	Large	Some	Yes	Many	Consistent
	2. Parents may not spontaneously consider the potential impacts of alcohol-branded merchandise, but can be concerned once made aware.	- Qualitative (n = 1)	Low	Small	One	Yes	One	NA
<b>Point-of-Sale Promotions</b>	1. Point-of-sale promotions are common in Australia.	- Audit (n = 1)	Low	Small	One	Yes	NA	NA
	2. Point-of-sale promotions lead young adults to purchase higher quantities of alcohol.	- Quantitative (n = 1) - Qualitative (n = 2)	Low Moderate	Small	One	Yes	One	Consistent
<b>Corporate Social Responsibility</b>	1. Responsible drinking campaigns designed by the alcohol industry are ambiguous and may bolster social norms around binge-drinking.	- Qualitative (n = 1)	Moderate	Small	One	Yes	One	NA
	2. Corporate social responsibility practices have explicit marketing benefits.	- Content (n = 1)	Moderate	Small	One	No	NA	NA

## 9 Discussion

### 9.1 Overview of findings and recommendations in the literature

The research reviewed in this report provides a comprehensive and current assessment of the nature, extent, and impact of alcohol promotion activities in Australia and worldwide. The findings demonstrate that alcohol marketers are employing a range of sophisticated techniques across many different channels to promote their products. Research findings show that young people are exposed to a large variety and high volume of alcohol promotion. This exposure is associated with a greater likelihood of initiating alcohol consumption at an earlier age and drinking more. In particular, there is a strong and consistent evidence base showing that advertising on traditional media leads to earlier initiation, greater alcohol consumption, and a higher likelihood of engaging in problematic drinking among young people. These findings are now being replicated in other areas of alcohol promotion such as sports sponsorship, digital media, alcohol-branded merchandise, point-of-sale promotions, and corporate social responsibility. These areas of research are newer and, as such, the research base is not as large and established as for traditional media. However, research in these newer areas of investigation still consistently demonstrates a link between exposure to alcohol promotion and greater alcohol consumption.

In light of the above findings, many researchers have argued that immediate action should be taken to reduce youth exposure to all types of alcohol promotion. This literature review has presented considerable evidence showing that the industry-driven regulatory processes that apply to alcohol advertising in much of the developed world, including Australia, are largely ineffective. This has been demonstrated through multiple studies showing violation of both the spirit and letter of alcohol advertising codes (Noel & Babor, 2016; Noel, Babor, & Robaina, 2016). Many reasons have been cited in the literature for this apparent lack of efficacy, and there seems to be some consensus on the major issues contributing to the current state of affairs. Common criticisms and suggestions for change are listed below.

**(1) Conflicts of interest are inherent in self-regulatory systems.** Self-regulatory systems by their very nature are organised and funded by the alcohol and advertising industries, and regulatory boards tend to consist primarily of industry members. Researchers suggest

that this presents an unavoidable conflict of interest because board members may risk losing substantial revenue if a given complaint is upheld (Noel & Babor, 2016). Indeed, research shows that ABAC rulings that find no violation of the code have been contradicted when evaluated by independent reviewers (Australian Medical Association, 2012). It has therefore been suggested that codes and processes should be designed and developed by experts independent of the alcohol and advertising industries and that regulatory bodies should be comprised of independent board members to ensure rulings are balanced and just (Australian Medical Association, 2012; Hastings et al., 2010a; Noel & Babor, 2016; Noel, Babor, & Robaina, 2016; Searle et al., 2014; Vendrame et al., 2015). It has also been suggested that representatives from vulnerable populations, such as young people, should be involved in the complaints process (Hastings et al., 2010a; Noel, Babor, & Robaina, 2016; Searle et al., 2014).

**(2) Complaints-based regulatory systems have significant limitations.** Complaints-based regulatory systems rely on the community to report cases of advertising that may violate advertising codes. However, low community awareness of advertising codes reduces the number of complaints made. Indeed, in Australia only around 3% of the public are aware of the existence of the ABAC, so complaints lodged are highly unlikely to accurately reflect community concern (Australian Medical Association, 2012). Second, increasingly integrated, sophisticated, and targeted alcohol promotion practices, such as those on social media, mean that target audiences may not even recognise advertising and are therefore unlikely to submit a complaint (Brodmerkel & Carah, 2013). Third, there is often a significant time-lag in complaints processing, which means that the offending advertisement may be broadcast or disseminated long after the complaint is filed (Australian Medical Association, 2012; Noel & Babor, 2016). This is particularly problematic in the case of digital media where the fast-paced nature of this kind of promotion means that by the time it is recognised and submitted as a complaint it may have already been distributed through social networks (Brodmerkel & Carah, 2013). Many researchers suggest that instead of a complaint-based system, a pre-vetting system to examine whether advertising is in violation of codes before it is widely disseminated would be more useful and appropriate (Australian Medical Association, 2012; Hastings et al., 2010a; Noel & Babor, 2016).



- (3) Self-regulatory codes are often written in a way that is vague, ambiguous, and includes loopholes.** These characteristics have been proposed to lead to both the spirit and the letter of codes being violated (Noel, Lazzarini, Robaina, & Vendrame, 2016). Research showing that alcohol marketers attempt to push the boundaries of advertising codes by finding skilful ways of incorporating prohibited themes attests to the limitations of how advertising codes are often phrased (Hastings et al., 2010a). In response to this problem, there is support for changes to the wording of codes so they delineate what can be included in alcohol promotion rather than what cannot be included to avoid ambiguity (Noel, Babor, & Robaina, 2016).
- (4) There are no meaningful sanctions for violation of the codes.** High rates of code violation in countries with self-regulation are considered evidence of a lack of meaningful sanctions (Noel & Babor, 2016). Many researchers suggest that the regulatory codes should be supported by meaningful statutory-enabled sanctions (Australian Medical Association, 2012; Hastings et al., 2010a; Hastings & Sheron, 2013; Noel, Babor, & Robaina, 2016).
- (5) The scope of many self-regulatory codes is too limited.** This criticism has a number of different facets as summarised below.
- a) Currently, the ABAC does not cover several types of alcohol promotion to which youth are exposed and that have an effect on alcohol consumption, such as alcohol-branded merchandise and sports sponsorship (Australian Medical Association, 2012; Australian National Preventive Health Agency, 2014; Belt et al., 2014; Faulkner et al., 2016; Graham & Adams, 2014). Given that these are recognised components of the marketing mix and are associated with greater alcohol consumption among young people, there does not appear to be a justifiable reason for their omission from advertising codes. Furthermore, some argue that codes should be written with sufficient flexibility to incorporate future, as yet unknown, forms of promotion (Australian Medical Association, 2012).
  - b) Many argue that given the known cumulative effects of advertising on alcohol consumption, alcohol advertising codes should cover not only the content of

advertising, but also the volume (Adams et al., 2014; Australian Medical Association, 2012; Carah, 2014; de Bruijn, Tanghe, et al., 2016).

- c) Some researchers have argued that codes designed to regulate the content of advertising fail to take account of novel promotional tactics that are being employed on digital media. The embedded and pervasive nature of these tactics allows alcohol to be integrated into the everyday lives of young people, resulting in calls for more comprehensive regulation (Brodmerkel & Carah, 2013; Carah, 2014; Purves et al., 2014). Researchers also suggest that there should be a system in place to track the exact extent of youth exposure to alcohol promotional activities online, which would ideally involve full disclosure from alcohol companies and social media sites (Brodmerkel & Carah, 2013; Jernigan & Rushman, 2014).
  
- d) Many suggest that advertising codes should also be stricter about placement. One common argument in Australia relates to the need to close the loophole that allows alcohol advertising during children's popular viewing times on television if broadcast during sports programs (Australian National Preventive Health Agency, 2014; Carr et al., 2016; O'Brien et al., 2015). Another suggestion is for the watershed time for television alcohol advertising to be moved substantially later in light of research showing that young people's television viewing peaks between 8:30pm and 9:30pm (Carr et al., 2016; O'Brien et al., 2015). There is some debate over this suggestion because modelling shows that by moving the watershed to a later time, young children may be protected but advertising is then concentrated in times when adolescents and young adults are more likely to watch television (Ross, de Bruijn, & Jernigan, 2013). Therefore, changes to watersheds should be closely monitored if implemented. More broadly, many have suggested that placement regulations should significantly limit or even ban advertising on media platforms that are predominantly used by young people, such as certain social media platforms (Brodmerkel & Carah, 2013).

In light of these apparent shortcomings of the largely self-regulated systems that apply to alcohol advertising in Australia and much of the developed world, many researchers have advocated the adoption of strong statutory regulations (Bosque-Prous et al., 2014; Lobstein et al., 2016; Noel, Babor, & Robaina, 2016; Stautz et al., 2016; Weaver et al., 2016).

Importantly, it has been argued that a comprehensive approach should be taken whereby all

areas of promotion are systematically regulated because of the likelihood that alcohol ad-spend will simply be diverted to unregulated areas, as demonstrably occurred during the regulation of tobacco advertising (World Health Organization, 2013).

The French model of alcohol advertising legislation, the Loi Évin, has frequently been proposed as a useful model of statutory regulation (Noel & Babor, 2016; Noel, Lazzarini, et al., 2016). There are some important features that make this legislation effective. First, the law states what content is permitted and which channels can be used, rather than stating what is not permitted. This removes ambiguity when judgements are being made about whether promotional practices fall within guidelines. Second, legislated monetary sanctions mean that there are meaningful disincentives to discourage code violation. However, a recent analysis of the effectiveness of the Loi Évin in France shows that the law has been weakened over time through lobbying by the alcohol industry, resulting in many young people being exposed to multiple forms of alcohol promotion that were initially not permitted by law. For example, alcohol advertising was not permitted on billboards, yet this has now been reintroduced as a permitted channel. Furthermore, the law was amended to state that alcohol promotion is permitted online, despite the potential for high youth exposure on this medium (Gallopel-Morvan et al., 2016). As a consequence, researchers argue that other countries aiming to implement similar laws should use the 1991 version of the legislation as a model (Gallopel-Morvan et al., 2016). Ultimately, many suggest that a longer-term goal would be for such policy to be supported by concerted international efforts, with the Framework Convention for Tobacco Control proposed as a useful example (Australian Medical Association, 2012; Casswell, 2012; Landon et al., 2016; Moodie et al., 2013; Morgenstern et al., 2014).

## 9.2 Conclusion

Alcohol promotion in Australia and worldwide is highly sophisticated, widespread, and leads to increased alcohol consumption among young people. Current regulatory approaches, predominantly led by the alcohol industry, are largely ineffective at protecting young people from the negative effects of alcohol promotion. Many argue that independent, comprehensive, and statutory regulations are required and should be implemented immediately.

## 10 References

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