**Alcohol, Advertising, Media and Consumption among Children, Teenagers and
Young Adults**

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Abstract

While much research on the roles of mediated communication in relation to alcohol consumption, drinking practices and alcohol-related issues has traditionally focused on alcohol advertising and related types of alcohol promotion, recent decades have witnessed a growing recognition that research attention needs to be given to the wider media and symbolic environment, through which norms and values associated with the use and abuse of alcohol are communicated. We start by reviewing the growing body of research which has examined the extent, distribution across media and genres, and the content of media messages about alcohol and drinking in advertising and entertainment media content. We then proceed to review the research evidence on how young people's learning about alcohol, beliefs about alcohol and alcohol consumption practices are informed or influenced by alcohol advertising/promotion and by the types of media representations of alcohol identified in the first part of our review. Key approaches and frameworks for analysing the role and influence of media representations of alcohol on young people's alcohol-related beliefs and practices are examined before considering the role of communication research evidence in relation to (political) questions about the regulation/restriction of alcohol promotion and images in the media. The review demonstrates that significant progress has been made in recent decades towards mapping the contours of the mediated message environment regarding alcohol and, hence, towards identifying where potential effects or influences of media messages about alcohol may or are likely to occur. Our review of research approaches and research evidence on the impact of mediated messages about alcohol on (young) people's beliefs, perception and behavior regarding alcohol

and its uses confirms the complex theoretical, conceptual and methodological challenges which continue to confront research on media influence/effects. Research evidence in this field has thus established significant and extensive correlations between exposure to media messages and alcohol consumption and beliefs, but has generally failed to demonstrate causality. We conclude by noting areas for improvement in the approaches and measures deployed in research on the influence of media messages about alcohol, and by delineating the areas revealed by the review as areas that in particular would merit further and intensified research attention, namely notably communication (promotional or other kinds) about alcohol in the new media environment.

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ALCOHOL, ADVERTISING, MEDIA AND CONSUMPTION AMONG CHILDREN, TEENAGERS AND YOUNG ADULTS

1. Introduction

Concern about the role played by excessive alcohol consumption in relation to a wide range of social and health related problems in society is neither recent nor new, but such concerns have been growing considerably in the last few decades (British Medical Association, 2008; Hastings & Angus, 2009; Martinic & Measham, 2008a). This is evidenced amongst other things in increased media and public attention to alcohol-related ‘issues’ (Plant & Plant, 2006; Gunter et al, 2010), but most particularly, it is evident in both the growth and increasing diversification since the 1980s in research on all aspects of mediated communication about alcohol and its role or influence on beliefs and behavior regarding alcohol.

Resonant of the particular foci that have characterised research and public controversy in relation to other areas of legal substance use and abuse, particularly smoking and tobacco, much of the concern about alcohol has traditionally focused on the role of advertising and related forms of promotion (Hastings & Angus, 2009). While advertising and other forms of marketing communication continue to be a prominent focus for research and public concern, it has also long since been recognised that attention needs to be given to the wider symbolic environment, through which norms and values associated with the use and abuse of alcohol are communicated (see Martinic & Measham, 2008a).

Since the late 1970s numerous studies have examined the portrayal of alcohol and drinking across a broad variety of media (television, film, radio, newspapers, popular music, literature and – more recently – the internet) and media

genres (advertising, persuasive communication campaigns, television drama, situation comedy, news, feature films, cartoons and animated films, radio music and talk shows, etc.). Hence not all depictions of alcohol consumption are contained within sales messages; alcohol also features in drama and other entertainment content and is discussed in the news.

It is important, in setting the scene, to explain which areas of research literature we will cover and those that we will not. First of all, while we differentiate between ‘marketing’ and ‘non-marketing’ depictions of alcohol products and their use in this chapter, our review of marketing-related evidence will focus on that deriving from research into mass media advertising (e.g., in film, television and print media). ‘Marketing’ can also refer to promotional activities connected with brand image establishment and sales that includes direct mail shots to households, point-of-sale premium offers, product displays and packaging features. Research on these activities will not be covered here.

Second, research into non-marketing content effects will focus on mainstream media content and its alleged ‘effects’ or more often its associative links with self-reported alcohol consumption. There is a body of research that has examined the way alcohol issues are reported and represented in the news, but these studies are more usually concerned with positioning alcohol consumption as a social problem than demonstrations of its consumption (or encouragement to consume) (Hansen & Gunter, 2007).

Our primary interest here is centered on research that has attempted to demonstrate the potential or actual impact of alcohol-related depictions in dramatic narratives. This has sometimes been investigated by attempting to measure reported exposure to specific categories of media entertainment content, although many studies

have obtained broad estimates of overall claimed levels of consumption of specific media (e.g., total amount of TV watching). The rapid penetration of the Internet and third generation mobile telephones has established these platforms as increasingly important advertising media. Research into their role in the context of alcohol advertising has been very limited, but some reference is made to early observations about the way these technologies are being used here.

Third, in examining the ‘impact’ of alcohol advertising or media portrayals a distinction is often made in marketing research between macro-level (econometric) investigations of statistical relationships between advertising campaigns and total volumes of consumption or sales and micro-level investigations of whether consumption at the level of the individual consumer is affected by their personal advertising exposure history. This review will focus on research concerning micro-level assessments of relationships between reported exposure to alcohol advertising and reported consumption of alcohol (or alcohol-related dispositions) for the individual consumer.

Fourth, since most of the concern about alcohol misuse and most of the research on this subject has focused on young people, this is also where our review will be situated. In this respect, ‘young people’ can be taken to mean children, teenagers and young adults up to their mid-20s.

Recognising that excessive alcohol consumption is a social problem is one thing; identifying its causes is another. In debates about the genesis of alcohol consumption and the factors that could encourage potentially damaging levels of consumption, the advertising practices of alcohol manufacturers and distributors have come under fire along with examples of irresponsible consumption depicted in the mass media (Fisher & Cook, 1995; Hastings, MacKintosh & Aitken, 1992; Hastings,

Anderson, Cook & Gordon, 2005; Mathios, Avery, Bisogni, & Shananhan, 1998; Pitt, Forrest, Highes & Bellis, 2003).

One key point that has repeatedly been made (e.g., Wallack, Breed & Cruz, 1987; Hansen, 1995; Montonen, 1996; Hastings & Angus, 2009; Strasburger, Fuld, Mulligan, Altmann et al, 2010) over the last few decades is the imbalance between the communicative resources deployed in the service of alcohol promotion compared with those aimed at educating about the potential dangers associated with the use and abuse of alcohol, resulting in a symbolic message environment that is significantly skewed towards increasing consumption at the expense of messages urging moderation or abstinence. As Strasburger et al (2010: 791) succinctly put it:

Although parents, schools, and the federal government are trying to get children and teenagers to “just say no” to drugs, more than \$25 billion worth of cigarette, alcohol, and prescription drug advertising is effectively working to get them to “just say yes” to smoking, drinking, and other drugs [...] The result is that young people receive mixed messages about substance use, and the media contribute significantly to the risk that young people will engage in substance use.

Given the increasingly media-saturated and mediated nature of our social environment, it is perhaps little wonder that research has had difficulty, as we shall see later in this chapter, in demonstrating simple linear effects between alcohol advertising and alcohol consumption-related beliefs and behavior. Rather, as many have argued and as the diversification of research on ‘alcohol and the media’ shown in this review testifies to, it is necessary to consider how images, messages and values communicated about alcohol and drinking resonate with, reflect and in turn inform

wider symbolic and cultural values and notions regarding the (acceptable) use of alcohol.

Our aim in this chapter, thus, is to review how research has addressed and contributed – since the late 1970s – to our understanding of the role of media and mediated images of alcohol and alcohol consumption in relation to real and perceived problems associated with alcohol consumption in society. We start, in the first part, by examining research on the ways alcohol has been presented, focusing first on the deliberate promotion of alcohol through advertising and marketing, and then moving on to reviewing research that has sought to address the wider symbolic message environments of images of alcohol and drinking in film and broadcast entertainment content. In the second part, we then move on to reviewing research examining the ways in which media messages about alcohol impact on public belief, perception and behavior with regard to alcohol and drinking.

2. Mediated Representations of Alcohol

Promoting Alcohol

The promotion of alcohol and alcohol-consumption through advertising, sponsorship and other marketing practices is but one component of the wider symbolic and mediated environment through which images, beliefs and ideas about alcohol and its uses are generated, circulated and sustained in society. Given the deliberately conspicuous and intentionally persuasive nature of alcohol advertising and promotion, it is, however, not surprising that this has been the predominant focus of much of the research on media and alcohol over the last several decades. We shall discuss the research evidence on how alcohol advertising and promotion influences public beliefs and behavior regarding alcohol and alcohol consumption later in this

review, but first we focus on research that has examined the extent and nature of alcohol advertising and promotion.

Research on the extent and nature of alcohol advertising and promotion has focused variously on the amount of expenditure by the alcohol industry, on the volume of alcohol advertising, on the placement/distribution of alcohol advertising across different types of media, on ‘exposure’ statistics detailing how much alcohol advertising audiences for different media are exposed to, and, perhaps most prolifically, on the content or messages about alcohol and drinking communicated through alcohol advertising. In very general terms, the conclusions and concerns emanating from this considerable body of research focus on the very significant and increasing sums of money channelled into the promotion of alcohol, the sophisticated and strategic use of different media and different forms of promotion, the extent to which younger audiences – particularly those who are below the legal age for alcohol consumption – are exposed to promotional messages, and the extent to which idealised positive and ‘normalising’ messages about alcohol and drinking dominate at the expense of messages highlighting the potential adverse social and health effects associated with alcohol.

Expenditure and Exposure

The amount of money spent by the alcohol industry on advertising and marketing of alcohol is impressive and significant by any standard of comparison (Grube, 2004; Hastings & Angus, 2009; Jernigan, 2010), but particularly, as frequently noted by researchers, when compared with expenditure on health promotion marketing and advertising. Hastings and Angus (2009: 14) thus note that the total spent in the UK on alcoholic drinks advertising on television, radio, in the press, outdoors, and in cinemas increased overall from £167m in 2002 to £194m in

2006, but that these figures need to be seen in the context of an estimated overall annual expenditure by the alcohol industry of approximately £800m on all marketing communications as a whole (Hastings & Angus, 2009: 15). They further point to this as part of a wider global trend for marketing expenditure to shift away from traditional forms of direct advertising in the print and broadcast media to other types of promotional activity such as 'sponsorship, competitions, special promotions and an increased focus on new media online and via mobile phones' (Hastings & Angus, 2009: 16).

There is a growing body of research, focusing on the placement of alcohol advertising in particular media, examining the extent to which young people are particularly targeted or exposed to alcohol advertising and other forms of alcohol marketing promotions. Snyder et al (2000) for example note that a large proportion of beer advertising appears in televised weekend sports programming and during prime-time television programming with a sizeable audience below the legal drinking age. An earlier study in the UK (Barton & Godfrey, 1988) similarly found alcohol advertising on television to be prominent overall (12% of advertising in their sample), prominently positioned within advertising breaks (occurring in first position 56% of the time), longer than other product commercials, and to occur with greatest intensity between 6pm and 7pm when children make up a significant proportion of the audience.

While the study of the extent and positioning of alcohol advertising across different media does not directly investigate the impact that such advertising may have on media audiences, including younger audiences, it helps in identifying where potential effects may occur. This level of analysis is important in view of evidence that indicates widespread and repeated exposure of young people to alcohol

advertising, especially on television (CAMY [Center on Alcohol Marketing and Youth], 2002; Grube, 1993; Winter, Donovan, & Fielder, 2008; Fielder, Donovan, & Ouschan et al., 2009), but also on radio (CAMY, 2007) and in magazines: see Montes-Santiago et al. (2007) on magazine advertising in Spain; Garfield et al (2003) and Siegel et al. (2008) in the US; and Donovan et al. (2007) on magazine advertising in Australia. It has been reported in the United States that viewers aged 12 to 20 years are likely to see more alcohol advertising than older viewers given the types of programs in which such advertising most often occurs (CAMY, 2004).

Research published in the United States by the Center on Alcohol Marketing and Youth (CAMY) has been used to reinforce the accusation that alcohol advertisers engage in deliberate targeting of young people. The placement of alcohol advertisements on radio (CAMY, 2007) and in magazines was found to target broadcasts and publications widely consumed by the youth market. This was reported to be true especially in the case of advertisements for beer and distilled spirits (CAMY, 2003, 2005). One study found evidence that ‘the number of alcohol advertisements in magazines increases significantly with the proportion of youth readers, even after controlling for young adult readership. Our results indicate that youths are disproportionately exposed to alcohol advertising and that reducing youth exposure to alcohol advertising remains an important public policy concern.’ (Siegel, King, Ostroff, Ross, Dixon, & Jernigan, 2008: 482). More recently, research by the Center on Alcohol Marketing and Youth found that a pledge in 2003 by leading alcohol companies to significantly reduce the amount of alcohol advertising placed in magazines with a sizeable underage readership resulted in a 48% decline between 2001 and 2008 in youth exposure to alcohol advertising: ‘Alcohol advertising placed

in publications with under 21 audiences greater than 30 percent fell to almost nothing by 2008' (CAMY, 2010b: 1).

In sharp contrast, the continued importance of television as an advertising medium for the alcohol industry is emphasised by recent research showing that youth (aged 12-20 years) 'exposure to alcohol advertising on US television increased 71 percent between 2001 and 2009' (CAMY, 2010a: 1). The research further notes that this increase was driven by the rise of distilled spirits advertising on cable television and that 'youth exposure to all distilled spirits TV advertising was 30 times greater in 2009 than in 2001' (CAMY, 2010a: 1). The report concludes that the US alcohol industry and trade associations' commitment in 2003 to advertise only when the underage audience made up less than 30 percent of the television audience had been wholly ineffective in reducing underage exposure to alcohol advertising on television in both absolute and relative terms.

Fielder et al. (2009) examined exposure levels in relation to alcohol advertising on Australian metropolitan free-to-air television. They found that overall children (0-12 years) were exposed to one-third the level of mature adults (defined as 25+ years), but there were considerable variations between cities. In two metropolitan markets, underage teens (13-17 years) thus had higher rates of exposure than young adults (18-24 years). The study also found that the '30 highest exposed advertisements contained at least one element known to appeal to children and underage youth, with 23 containing two or more such elements.' (p.1157). On the basis of these findings, the authors argue that the self-regulating system governing alcohol advertising in Australia 'does not protect children and youth from exposure to alcohol advertising, much of which contains elements appealing to these groups.'

Despite apparent recent reductions in underage exposure to magazine alcohol advertising, the overall picture that emerges from research and longitudinal monitoring in the US, Australia and elsewhere is one of high and increasing levels of alcohol advertising in media which reach young audiences below 21 years of age. The evidence also suggests that voluntary restrictions have not been successful in relation to television alcohol advertising. Evidence of the increased exposure of younger audiences to alcohol advertising and related promotion is particularly relevant in the light of the conclusions reached by a recent comprehensive review of research on the impact of alcohol advertising, namely that ‘exposure to media and commercial communications on alcohol is associated with the likelihood that adolescents will start to drink alcohol, and with increased drinking amongst baseline drinkers’ (Anderson, de Bruijn, Angus, Gordon, & Hastings, 2009: 229; see also Nunez-Smith, Wolf, Huang, Chen, Lee, Emanuel, et al., 2010, whose comprehensive review reached similar conclusions).

The Messages of Alcohol Advertising

In addition to the research reviewed above on alcohol advertising expenditure and alcohol advertising exposure across different media, a major focus of research since the late 1970s has been the actual content and messages of alcohol advertising. Drawing predominantly on the method of content analysis, and on the theoretical frameworks of social learning theory and cultivation analysis, numerous studies have examined the characters (including their demographic profiles), themes, social contexts, types of alcohol, social and gender values and other content dimensions portrayed and communicated in alcohol advertising.

Early studies of magazine and television alcohol advertising in the United States (Breed & DeFoe, 1979; Atkin & Block, 1981; Finn & Strickland, 1982a and

1982b; Strickland & Finn, 1984; Neuendorf, 1985; Postman, Nystrom, Strate, & Weingartner, 1987) found alcohol advertising to be not only prominent, but perhaps more significantly to persistently link alcohol consumption with having fun with friends, relaxation, humour and with 'valued personal attributes such as sociability, elegance, and physical attractiveness and with desirable outcomes such as success, relaxation, romance, and adventure' (Grube, 2004).

Research in the recent two decades has confirmed similar findings, showing, *inter alia*, that alcohol advertising tends to portray alcohol consumption in glamorous, luxurious and highly pleasurable settings and to associate alcohol consumption with social and sexual success (Grube, 1993; Madden & Grube, 1994). Content studies of alcohol advertising show this to be characterised by the prominence of 'lifestyle themes associating alcohol consumption with long-term wealth and success, then social approval among friends or acquaintances, relaxation, purely hedonistic pleasure, exotic travel and experiences, individualism and selfish experiences, and finally sexual success' (Gunter, Hansen, & Touri, 2010: 32).

Studies of alcohol advertising on television in New Zealand (Trottman, Wyllie, & Casswell, 1994; Hill, 1999) and in Brazil (Pinsky & Silva, 1999) have similarly found much emphasis on themes of masculinity (including success with the opposite sex), camaraderie and humour, following or taking part in sports, conformity and relaxation. In their study of Brazilian television advertising, Pinsky and Silva (1999) also found themes of national symbolism to be prominent, and they found no advertisements containing moderation messages, while a small proportion of advertisements contained appeals that promoted excessive drinking.

A study of beverage advertising in popular magazines and television in the US during 1999-2000 (Austin & Hust, 2005) concluded that alcohol advertisements

emphasised sexual and social stereotypes and lacked diversity. Research in the UK has found alcohol advertising in magazines aimed at women and men respectively to generally promote a discourse of 'drinking as normality' while also being clearly gender-differentiated in the sense that women's and men's drinks and drinking behaviors are portrayed in line with pronounced gender-stereotypes (Lyons, Dalton, & Hoy, 2006).

Research from the United States found that the most common themes associated with alcohol advertising broadcast within televised sports programmes were humour, friendship, surreal fantasy and love/sex/romance. Less common themes were escape/adventure and success/achievement. Few advertisements still focused on product quality and very few exhibited moderate drinking themes (Zwarun & Farrar, 2005). Given the prominence of alcohol advertising images, across different media, associating alcohol with themes such as the ones identified above (including masculinity, relaxation, friendship and camaraderie, humour, love/sex/romance, etc.) – many, maybe most, of which appeal to young people - it is not difficult to conceive the potential roots of impact of advertising on early alcohol consumption.

Alcohol Promotion in New Media

While alcohol advertising in the established media of cinema, print and broadcasting is in many countries relatively firmly regulated, new media such as the internet and mobile phones have proved rather more resistant to regulatory controls. The promotion of alcohol on the internet comes in a variety of forms, including advertising and linking of alcohol brand names with more generalised entertainment and information content. Web sites are often produced or sponsored by alcohol manufacturers and link alcohol brands with interactive games, music and online social networks designed to have special appeal to the youth market (see Anderson, 2007).

Research by the Center on Alcohol Marketing and Youth (CAMY, 2004b) shows that, despite age verification screens and similar blockers or filters positioned at the front of web sites, significant numbers of children and teenagers are attracted to and access branded alcohol web sites because of the games, entertainment, interactive content and fun downloads that are available here. Due to the deliberately interactive design of websites users easily become ‘marketers, engaging in “viral” marketing that makes them inadvertent promoters of the brand to their friends by sending branded e-cards and the like’ (Jernigan, 2010: 70).

Gunter et al (2010) similarly reference work in Australia (Roberts, 2002) and New Zealand (Borell, Gregory, & Kaiwai, 2005) examining the features and promotional strategies of web sites maintained by alcohol companies. These internet sites were found to utilise a number of attributes that could be expected to have youth appeal. Colour schemes, music, video material, download options and interactive games featured among other attributes as core elements. Controls over entry to the sites were found to be minimal and could be easily circumvented by under-age users. Featured prominently were competitions, many of which had sexual and sporting themes. A number of campaigns depicted young attractive females. In some instances, these models were depicted at or in association with sports events. These alcoholic brand web sites often formed part of a mixed media marketing strategy that embraced a wide range of marketing devices that included advertising in mass media, sponsorship of (usually sporting) events, and merchandising.

In a recent review, Jernigan (2010) further points to mobile phones as a ‘new frontier for alcohol marketing’. While little systematic research exists into alcohol marketing via mobile phones, the increasing convergence of digital technologies, resulting in enhanced cross-platform availability and delivery of alcohol

advertising and associated marketing, is a field ripe for study and monitoring if we wish to begin to understand the modern ecology of marketing communication in its multifaceted forms.

Alcohol in Entertainment

While alcohol advertising and promotion provide perhaps the most obtrusive and obvious images and messages about alcohol in the public sphere, it has been recognised since the 1970s that advertising of alcohol draws on, engages with and plays into a wider symbolic environment that is itself redolent with mediated images of alcohol and drinking. Since the late 1970s much research has thus focused on studying the portrayal of alcohol in popular television entertainment programming, notably television drama serials (soaps) and series, while a significant but less prolific body of research has also emerged into the portrayal of alcohol and drinking in other genres and media, such as film (Cook & Lewington, 1979; Denzin, 1991; Roberts, Henriksen, & Christenson, 1999; Stern, 2005), radio (Pitt, Forrest, Hughes, & Bellis, 2003; Daykin, Irwin, Kimberlee, Orme, Plant, McCarron, et al., 2009), popular music lyrics (Cruz, 1988; Herd, 2005), popular fiction (Cellucci & Larsen, 1995; Greenman, 2000) and music videos (DuRant, Rome, Rich, Allred, Emans, & Woods, 1997; Robinson, Chen, & Killen, 1998; Van den Bulck & Beullens, 2005; Beullens & Van den Bulck, 2008). Given the rapid growth and popularity of the internet, mobile phones and related new media technologies in the last 10-15 years, it is perhaps surprising that only a small number of studies (e.g. Moreno, Briner, Williams, Brockman, Walker, & Christakis, 2010) have so far focused on how these media contribute to the articulation and circulation of alcohol-related images, representations and messages.

Film

Research on Hollywood films has demonstrated the relatively consistent prominence of alcohol depiction in popular films since the 1940s (McIntosh, Smith, Bazzini, & Mills, 1998). Everett et al (1998), in an analysis of top grossing American films from 1985-1995, found that 96 percent of films contained references to alcohol use, while Roberts et al. (1999) found 93 percent of the 200 most popular movie rentals in 1996 and 1997 included depictions of alcohol use. According to these studies, negative consequences associated with alcohol consumption are infrequently shown, and when alcohol is depicted, 'pro-use' statements are more than twice as frequent as 'anti-use' statements (Roberts & Christenson, 2000). Drinkers are shown as more socially and sexually successful than non-drinkers, though also as more aggressive at times. Alcohol consumption in films is essentially depicted as normal and unproblematic (McIntosh, Smith, Bazzini, & Mills, 1998).

In a recent content analysis of top grossing 'teen-centred' films from 1999, 2000, and 2001, Stern (2005) found that two-fifths of teen-characters were depicted as drinking alcohol. Few differences were found between drinkers and non-drinkers in terms of physical attractiveness, socio-economic status, gender or virtuousness, and drinkers were rarely shown refusing offers to drink, regretting drinking, or indeed suffering any consequences – negative or otherwise – from alcohol consumption. Stern (2005) concludes that the overall message conveyed in films targeted towards a predominantly teen audience is that alcohol consumption in this age group is common, mostly risk-free, and appropriate for anyone.

Broadcast Entertainment

Since the late 1970s, a considerable number of studies have analysed the portrayal of alcohol and drinking in television programs. These studies have shown that portrayals of alcohol and drinking feature prominently in television entertainment

programming and with considerable regularity during peak-time television when young people can be expected to be numerically present in the audience (Breed & Defoe, 1981; Cafiso, Goodstadt, Garlington, & Sheppard, 1982). Studies in the early 1980s in the United States and in the United Kingdom found alcohol depictions in approximately two thirds of prime-time television entertainment programs (Hansen, 1986; Wallack, Breed, & Cruz, 1987), while studies focusing particularly on the most watched drama serials or soaps found 86 percent of these to contain visual or verbal references to alcohol (Furnham, Ingle, Gunter, & McClelland, 1997).

Using the method of content analysis and deploying similar units of analysis, a range of studies conducted since the early 1980s have provided evidence that shows overall increases in the prevalence and prominence of alcohol portrayal in television programming. Christenson et al (2000) thus found that 77 percent of primetime television programming in the US during the 1998-1999 season contained references to alcohol, while 71 percent depicted actual alcohol use. In a study examining alcohol-related references across news, drama and soaps on peak-time broadcasts during one week of terrestrial television output, Hansen (2003) found that references to alcoholic drinks and consumption occurred in 85 percent of programs analysed. Visual scenes of alcohol consumption were far more prevalent in soap operas (10.6 per hour) than in either drama episodes (4.3 per hour) or news (1.9 per hour). Comparisons of the soap opera data of Hansen (1986) and Furnham et al. (1997) showed that the rate of visual references had increased to 10.6 per hour in 2003 compared with 9.3 per hour in 1994-95 and 5.8 per hour in 1984. Alcohol drinking scenes rose from 3.9 per hour in 1984 to 6.4 in 1994-95 to 7.0 in 2003.

Analyses of television portrayal of alcohol have largely agreed also on the nature of such depictions: alcohol consumption in television programming is

presented in a very predominantly positive light. Alcohol consumption is predominantly used as a visual signifier of celebration or merely of pleasant and convivial social interaction. Alcoholic intoxication is seen as fun and often displayed in a humorous context, although depictions showing alcohol consumption as a coping mechanism that could be used by someone when under pressure or stressed also occur (Hanneman & McEwan, 1976; Atkin & Block, 1981; Breed, Defoe, & Wallack, 1984; Van Den Bulck, Simons, & Van Gorp, 2008).

Alcohol consumption on television has tended to be shown as an activity that is largely free of adverse consequences (Hansen, 1986; Grube, 1993; Mathios, Avery, Bisogni, & Shanahan, 1998). Portrayal of problematic drinking or the association of alcohol consumption with accidents, illness or anti-social behavior is infrequent. These studies have found little evidence of the portrayal of underage drinking: drinking characters tend to be male, middle class and middle age (e.g. Furnham, Ingle, Gunter, & McClelland, 1997).

Recent studies in the UK (Coyne & Ahmed, 2009), in New Zealand (McGee, Ketchel, & Reeder, 2007) and in the US (Russell & Russell, 2009) have added further confirmation to the general pattern of findings regarding television entertainment portrayal of alcohol and drinking. In a study of soap operas on British television, Coyne & Ahmed (2009) found that more than 90% of soap opera episodes depicted alcohol-related acts, with an average of 7.65 acts per episode. Assuming that most soap opera episodes are approximately 30 minutes in duration, this figure would indicate a potential further increase in the steady increase identified by Hansen (2003) in the rate of alcohol acts per hour of soap opera programming since the 1980s.

A study of alcohol imagery on New Zealand television (McGee et al., 2007) found similarly high rates of alcohol depictions, with an average of one

alcohol-related scene every nine minutes. Confirming patterns identified in previous studies, McGee et al. (2007) also noted that much alcohol imagery was incidental to storylines while scenes depicting uncritical imagery outnumbered scenes showing possible adverse health consequences of drinking by 12 to 1.

Russell and Russell (2009) reported a comprehensive content analysis of alcohol messages in US prime time television series. Their study monitored 144 unique episodes broadcast over a ten-week period during 2004. Like the British studies discussed earlier, they found alcohol portrayal to have become more prevalent: while data for the late 1990s (Christenson, Henriksen, & Roberts, 2000) showed that just over three quarters of prime-time television programs contained references to alcohol, Russell and Russell (2009) found every programme in their sample to contain references to alcohol.

While numerous studies have noted that film and television programs portray both positive and negative images of alcohol and drinking, albeit with a distinct emphasis on positive images, the study by Russell and Russell (2009) is particularly noteworthy for showing that positive and negative portrayals are qualitatively different. Thus negative messages tend to be foregrounded and central to the narrative, while positive messages are invariably communicated as part of the 'normal' background. This finding adds further ammunition to the argument (e.g. Wallack, Breed, & Cruz, 1987; Hansen, 1988; Lyons, Dalton, & Hoy, 2006) that television tends to naturalise alcohol consumption as the unproblematic and positive norm, while treating problem-drinking, alcoholism and negative outcomes associated with alcohol consumption as 'exceptional'.

Although the evidence regarding alcohol and drinking-related messages on radio is extremely limited when compared with television, it is clear from what little

evidence there is from studies in the US (CAMY, 2007) and in the UK (Pitt, Forrest, Hughes, & Bellis, 2003; Daykin, Irwin, Kimberlee, Orme, Plant, McCarron, et al., 2009) that radio may be a potentially important and significant source of perceptions and beliefs about alcohol and its use and abuse in society. Not only do these studies show that alcohol references are prominent in programmes aimed at and attracting a predominantly younger audience, but they also indicate how popular radio chat (including with audience members who phone in and with celebrities of various sorts) often draws on - and in turn perpetuates and reinforces – deep-seated cultural assumptions that stress drunkenness and excessive drinking as fun and amiable/sociable behavior.

In summary, numerous studies conducted since the late 1970s have demonstrated that alcohol and drinking images are prevalent throughout popular media entertainment content such as mass movies and television soap opera and drama series. There is also a growing body of evidence that the frequency of alcohol images in popular television drama serials/series has increased steadily over the last three decades since research first started monitoring in the early 1980s. The main findings of these studies show, amongst other things, that the portrayal of alcohol and drinking feature prominently in entertainment media and that drinking is on the whole associated with pleasant social interaction, that there is comparatively little portrayal of the negative consequences associated with drinking, and that drinking is frequently portrayed in the context of attractive situations and milieux and as a necessary component of ‘having a good time’.

3. Mediated Representations and Learning about Alcohol

This section will cover research evidence that explores how mediated representations of alcohol – both marketing and non-marketing messages – might play

a part in the socialisation of young people into taking up alcohol consumption. Relationships between exposure to marketing and non-marketing depictions of alcohol and reported consumption will be examined in Section 5. This section is concerned with the ‘messages’ about alcohol and its consumption that people – and especially the young and impressionable – acquire as a consequence of exposure to alcohol themes in marketing and non-marketing content.

One reason for presenting this evidence separately from research on behavioral effects is that it concerns ‘pre-behavioral’ responses linked to beliefs and attitudes about alcohol and its consumption. A number of influential psychological theories about the effectiveness of marketing and advertising have highlighted the importance of cognitive-level influences that often underpin orientations towards product ‘brands’ and associated promotional messages and can then mediate their behavioral impact (see Rucker, Petty & Priester, 2007). Equally, with non-marketing content, its influences must be contextualised in relation to established cultural, cognitive-level scripts and codes associated with alcohol consumption (Martinic & Measham, 2008a). A number of important questions are addressed here. Can mediated representations impart lessons about the benefits associated with alcohol consumption? Do they make excessive drinking appear to be the norm? Do young people acquire impressions about alcohol brands through promotional messages about alcohol? Is this learning significant in turn because it may lay down the foundations of onset of alcohol consumption and future patterns of alcohol use?

Although concern about alcohol and young people centres ultimately on consumption – notably the occurrence of bouts of excessive drinking or chronic abuse over time – it is important to understand why this behavior occurs at all. In this context, researchers have asked questions about young people’s orientations towards

alcoholic drinks in terms of what they think and feel about drinking alcohol. Alcohol consumption does not occur in a social vacuum and understanding how it is perceived by people, young or old, has to be informed by established socio-cultural behavioral patterns and norms related to alcoholic drinks (Martinic & Measham, 2008a).

Children can be exposed to alcohol from an early age and in this regard the orientations of their parents and other influential people in their lives are important role models (Fisher & Cook, 1995; Kuther & D'Alessandro, 2003). Parents may introduce children to alcohol (Wilks, Callan & Austin, 1989), but as they enter adolescence peer groups become more significant sources of influence and serve in particular as a source of encouragement of under-age consumption (Connolly et al., 1992). In addition, mass mediated depictions and promotions of alcohol consumption have been identified as important sources of influence in relation to attitudes towards alcohol consumption and awareness of branded products. Here, both marketing and non-marketing representations of alcohol have been hypothesized to play a part. In essence, youngsters can learn about alcohol by watching dramatic portrayals of its consumption in cinema films and television programs and through exposure to alcohol product advertising (see Gunter, Hansen & Touri, 2010).

Most attention has been fixed on alcohol advertising and especially that occurring in audio-visual media such as film and television. There are other aspects of alcohol marketing, however, that have also come under fire including promotions in retail outlets and bars. These often include special pricing offers which are more often considered as direct enticements to the young to consume alcohol to excess (Hastings, Anderson, Cooke & Gordon, 2005; Hastings & Angus, 2009).

Brand awareness has often been taken as starter evidence that children have taken on board early socialisation in acceptance of alcohol. Before they have

reached their teens, children have been shown to demonstrate abilities to recognise alcohol brands (Aitken, 1989; Aitken et al., 1988b; Wyllie, Zhang & Casswell, 1998). Children also learn to associate specific attributes with alcohol brands demonstrating some degree of brand image learning from advertising (Lieber, 1998). Critics who have called for tighter restrictions over alcohol marketing have sometimes inferred that branding is a critical causal factor that draws in young people and encourages alcohol consumption for the first time (Hastings et al., 1992; 1995; Hastings & Angus, 2009). Yet many marketing theories have defined the value of brands only in relation to established product class consumers (see Hoeffler & Keller, 2003; Keller, 2007; Naik, 2007). So far, none of the research that has indicated brand awareness among young people has yielded compelling evidence that this cognitive-level response drives the onset of alcohol consumption.

Mediated representations of alcohol consumption occur in non-marketing as well as marketing settings (Anderson, 2007). Portrayals of alcohol consumption in movies and TV programmes often occur alongside advertisements for alcoholic beverages and could potentially have independent or combined effects on young people who are exposed to them. There has been some evidence indicative of relationships between general media consumption and alcohol consumption, but it is less clear as to whether alcohol portrayals specifically have exerted a causal influence in this context.

Much of the research has relied on self-report measures of alcohol and media consumption. Media consumption measures have sometimes been further informed by parallel evidence of the amount of alcohol-related content identified in media for which exposure frequencies have been measured. Much of this evidence has been theoretically informed by cultivation analysis perspectives that have

traditionally made assumptions about levels of exposure to specific categories of media portrayal (usually on television) from relatively crude measures of exposure. Hence, typical findings have indicated that greater reported TV viewing or viewing of specified program genres were associated with a greater propensity for teenagers to consume alcohol (Andsager, Austin, & Pinkleton, 2002; Austin & Leili, 1994; Austin, Pinkleton & Fujioka, 2000). Norwegian research reported that teenagers' propensity to watch imported US TV programs, known via separate content analysis evidence to contain scenes of alcohol consumption, did display a greater likelihood of consuming alcohol. Advertising of most alcoholic beverages in Norway is banned (Thomsen & Rekve, 2006).

Research from the United States has reported statistical relationships between teenagers' self-reported TV viewing patterns, attitudes and beliefs about alcohol consumption, and actual consumption. Interest in drinking alcohol was associated with holding positive expectations about the social effects of using alcohol. This attitudinal disposition was not surprisingly associated with likelihood of actual consumption, and all these orientations towards alcohol displayed a weak statistical relationship with watching late-night TV programs (Austin, Pinkleton & Fujioka, 2000). Different explanations can be explored for such findings. It is possible that teenagers who stay up later watching television are also exposed to more advertisements for alcohol, if they occur in concentration at that time. However, it is equally possible that youngsters who drink more while under-age generally have greater freedom from parental control, stay up later (and not just to watch television) and engage in late-night social interactions that involve the consumption of alcohol.

Initial learning about alcohol consumption begins at an early age. Pre-teenage children can demonstrate an awareness of alcohol brands and a sense of

whether drinking alcohol is normative behavior (Hastings & Angus, 2009). There are many different factors that contribute to this early learning, but mediated representations of alcohol are among them. What is not always clear from empirical research is the level of importance that can be attached to alcohol advertising and media portrayals when placed alongside environmental, social and cultural factors in young people's lives.

4. Mediated Representations and Their Acceptance by Young People

From their early learning about alcohol, children and teenagers can develop psychological dispositions towards it that provide the foundation of their own eventual consumption. These dispositions become established within and are shaped by prevailing cultural and social contexts within which early socialisation takes place (Nahoum-Grappe, 2008). To determine whether this developmental process follows through, we need to consider empirical evidence that examines further how mediated messages about alcohol are taken on board by child, teenage and young adult consumers. How do young people react to promotional messages about alcohol? Do favorable responses towards media messages about alcohol underpin possible onset of drinking or condition future patterns of consumption? Can negative reactions to mediated messages about alcohol have the reverse effect?

Alcohol advertising has long been regarded as having a significant influence over the way consumers feel about alcoholic drinks (see Gunter, Hansen, & Touri, 2010). In the past, many promotional campaigns have linked alcoholic brands to specific and highly attractive lifestyles. A common practice has been to portray young people in this advertising and to play on themes – in particular general social popularity, success with the opposite sex, and having a good time – that resonate vibrantly with young consumers (Wallack, Cassady, & Grube, 1990). The objective of

this type of campaigning is to draw in the attention and psychological involvement of young people so that they identify personally with the brand through the lifestyle attributes it represents and come to see the consumption of the brand as a signifier of the social image they would like to project to others about themselves (Aaker, 1996).

The process of the alcohol brand as an ‘extension of self’ begins with the emergence of an early awareness of such brands. This awareness has been measured among pre-teenage children (Aitken, Eadie, Leathar, McNeill, & Scott, 1988b; Aitken, Leathar & Scott, 1988a; Waiters, Treno & Grube, 2001). Attention to alcohol advertisements – which is associated with brand awareness – was also found to be greater among early onset drinkers (Aitken, 1989). Disentangling the direction of causality in respect of this relationship has proven to be difficult. However, among children who were non-drinkers, one study reported that those who anticipated that they might drink when older displayed greater liking of alcohol advertisements than did those who claimed to be committed abstainers (Unger, Johnson, & Rohrbach, 1995).

Evidence has emerged over many years that children and adolescents often nominate alcohol advertisements as being among their favorites especially on television (Hastings, MacKintosh & Aitken, 1992; Nash, Pine & Messer, 2009). This may have as much to do with the generic entertaining nature of the narrative themes of these advertisements, such as the amount of humour they contain, as to whether young consumers are psychologically attracted to alcohol (Cragg, 2004; Neuendorf, 1985; Nash, Pine & Lutz, 2002; Waiters et al., 2001). A number of brands, such as Budweiser and Smirnov Ice, have run very popular campaigns that gained widespread consumer awareness because of their distinctive characterisations and catchphrases (e.g., the Budweiser frogs and ‘Whassup’ campaigns) and which struck a particular

chord with children and teenagers, whether they were drinkers or not (Chen, Grube, Bersamin, Waiters, & Keefe, 2005).

The association of celebrities with alcoholic products can attract the attention of young consumer and enhance recall and recognition of brands (Atkin & Block, 1981; Lieberman & Orlandi, 1987). Children's liking of alcohol advertisements can also be enhanced by positioning them close to popular entertainment, such as major sporting events (Phillipson & Jones, 2007). The presence of animated characters in alcohol advertisements is another factor that resonates successfully with children and teenagers (Collins, Ellickson, McCaffrey, & Hambarsoomians, 2005). Some production features appeal to specific consumer sub-groups rather than others. Thus, girls may be drawn more to alcohol advertisements with feminine themes (Aitken, 1989).

The attribute effects of alcohol advertisements evolve in terms of their effectiveness among young consumers as the latter progress through different stages of psychological development. Once they have entered their teens, young consumers become more sensitive to lifestyle fashions and trends. When these factors are effectively deployed in alcohol advertising, they can enhance the extent to which young people identify with the promotional message and the brand (Austin & Knauss, 2000). This process can begin even among pre-teenage children. Those who were better at identifying alcohol advertisements were also more likely to hold positive opinions about drinking (Cragg, 2004; Wallack, Cassady & Grube, 1990).

There is further evidence that media depictions of alcohol consumption, for example, based on portrayals of characters that drink in films and television programmes can impact upon alcohol-related socialisation of children and teenagers. This finding should be no surprise given evidence we have already reviewed that

showed drinking scenes have characterized popular TV drama serials for many years (Hansen, 1986, 2003; Furnham, Ingle, Gunter & McClelland, 1997; Wallack, Breed & Cruz, 1987). Pre-teenage boys have been shown to display more positive opinions about alcohol consumption after watching a program that portrayed characters drinking, though there was no clear evidence that such exposure led to an increased likelihood of drinking onset (Kotch, Coulter, & Lipsitz, 1986).

Movies made for the cinema that contain prominent alcohol consumption have also been found to be associated with a tendency of teenager viewers to consume alcohol (Hanewinkel, Tanski & Sargent, 2007). Over time, exposure to movies that depict alcohol consumption was linked among teenagers to the onset of drinking (Hanewinkel & Sargent, 2009). These survey studies can at best demonstrate degrees of association between self-reported exposure to media and alcohol consumption. Causality demonstrations require an interventionist methodology. So far, however, experimental studies of the impact of alcohol portrayals in films and programs have produced only limited evidence of direct effects of exposure on alcohol consumption (Rychtarik, Fairbank, Allen, Foy, & Drabman 1983; Kotch, Coulter, & Lipsitz 1986; Sobell, Sobell, Riley, Klajner, et al., 1986).

Children and teenagers can display a progressively more detailed and sophisticated awareness of alcohol brands as they grow older. Initial interest in alcohol can become established before their teenage years and advertising has been found to play a part in cultivating both that awareness and wider beliefs and attitudes concerning alcohol consumption. Alcohol advertisements can be popular among children and teenagers, but this should not invariably be seen as a signal that they are about to start drinking. Nevertheless, regular exposure to mediated alcohol marketing could create a familiarity with alcohol that can in turn condition a positive mental

disposition towards consumption. Media depictions of alcohol use in the media might add to advertising influences, but the evidence so far on the specific influences of this content remains ambiguous.

5. Alcohol Advertising, Media Depictions and Reported Consumption Levels

This section turns attention to claims that alcohol advertising and media portrayals of alcohol consumption can directly or indirectly influence young people's (i.e., children, teenagers and young adults up to their mid-20s) consumption of alcohol. Alcohol consumption can be influenced by a broad range of psychological, social, cultural factors. The empirical evidence accumulated so far has identified a mix of non-mediated and mediated variables that can trigger and shape interest in alcoholic beverages and their consumption (Martinic & Measham, 2008a; Gunter, et al., 2010). These factors come into play during childhood and as early interest in alcohol emerges long before legal consumption age.

In this context, we examine mediated influences that have been hypothesized to flow from advertising and media portrayals. In terms of approaches to understanding whether these mediated representations of alcohol can influence alcohol consumption, research has been dominated by survey methodologies and supplemented by a relatively modest number of experimental studies and some qualitative research. The limitations of these methodologies in relation to demonstrating causal links between media exposure and behavior are well known. Surveys in general can only demonstrate associational relationships between variables and are reliant of self-report evidence from respondents that can be problematic especially when attempting accurately to measure behavioral frequencies. Longitudinal designs, when skilfully executed and resourced, can provide firmer

indications of possible trigger effects of mediated portrayals in relation to target behaviors, but never control for all potentially relevant extraneous variables.

Experiments are designed to execute direct analysis of causal-effect relationships, but in their efforts to control or filter out all potentially influential causal agents other than those being manipulated, must create such artificial conditions for media exposure and behavioral observation that they lack ecological validity and may yield findings that have meaning only within the confines of the experimental setting. If experiments are moved out into the field, in an effort to enhance ecological validity, they must relinquish some control over extraneous variables and hence some of the limitations associated with surveys begin to surface. All these generic limitations serve as caveats we must always bear in mind when reviewing empirical evidence about the effects of mediated depictions of alcohol consumption on actual consumption of alcohol.

The seriousness of the potential impact of advertising messages about alcohol on its eventual consumption by children and teenagers has been emphasized by concerns raised by authoritative organisations such as the World Health Organisation. It has adopted an unequivocal stance that alcohol advertising can promote positive attitudes and beliefs about alcohol among children and teenagers and encourages young people to consume alcoholic beverages (Babor, Caetano, Casswell, Edwards, et al., 2003).

Three key theoretical models underpin this thinking. The first is that regular exposure to alcohol advertising can cultivate beliefs that alcohol consumption is normative behavior. This can therefore create a mindset among children and teenagers that ‘if everyone else is doing it, why shouldn’t I?’ One could generalize from this position further and argue that if non-marketing mediated portrayals of

alcohol consumption (e.g., in films and TV programs) represent a regular part of a young person's media diet, and also present a positive impression of drinking, the normative belief cultivation effect could be further reinforced.

A second possibility is that mediated depictions of alcohol consumption – whether in marketing or non-marketing settings – that display consumption by attractive characters might encourage direct emulation or imitation by young observers, especially if alcohol consumption is associated with specific 'rewards' such as an affluent lifestyle and social or sexual success.

A further potential outcome is that regular exposure to alcohol depictions in the media could provide constant reminders to young people about alcohol consumption and serve as cognitive primers that continually bring the idea of drinking into consciousness. According to some theorists, the more often young people think about drinking, the more likely they are to consume (Krank & Kreklewetz, 2003; Krank, Wall, Lai, Wekerle, & Johnson, 2003; Hastings, Anderson, Cooke, & Gordon, 2005).

Survey Studies

Survey studies can be divided into those conducted on a one-off basis and those that use repeat waves over time with the same panel of respondents. Both types of surveys have yielded evidence of significant statistical relationships between self-reported exposure to alcohol advertising and intended future or reported current alcohol consumption (Atkin & Block, 1984a; Atkin, Neuendorf & McDermott, 1983; Robinson, Chen, & Killen, 1998; Connolly, Casswell, Zhang, & Silva, 1994; Ellickson, Collins, Hambarsoomians, & McCaffrey, 2005; Grube, 1994).

Survey studies can be differentiated by the age group studied, with different investigations focusing variously on pre-teenage, teenage or early adulthood samples. With pre-teenage samples, alcohol consumption levels tend to be very low and so a more meaningful question for this age group is whether they intend to drink alcohol in the future. This intention is no guarantee that consumption will eventually occur, nor does denial of intention to drink mean that the young respondent will not change their mind later on. Nevertheless this measure has some significance as a signifier of early emergence of an interest in alcohol and has been found to provide a meaningful indicator of future drinking (Christiansen, Smith, Roehling & Goldman, 1989) .

One survey study with 11 and 12 year olds in northern California found that a range of social environment factors and media and marketing variables exhibited direct and indirect links to drinking intention. Parental drinking, peer approval and positive beliefs about alcohol exhibited the most direct predictive links to drinking intention. Knowledge of brands, product-related slogans and advertisements had no direct predictive links to intention to consumer alcohol, but advertising awareness did seem to contribute to positive beliefs about alcohol and these in turn were directly linked to expected future consumption (Grube, 1994).

One early series of studies reported that propensity to drink alcohol among American youngsters aged 12 to 18 years was associated with reported heavy exposure to alcohol advertising (Atkin & Block, 1984b). The same research project was extended to include respondents up to age 22 years found that problem drinking was associated with regular exposure to alcohol advertising (Atkin, Neuendorf, & McDermott, 1983). The findings from this research program have not been universally accepted. One critic challenged the robustness of the sampling and argued

that the sample contained a strong bias toward drinkers (Strickland, 1984). In a separate and parallel series of surveys with samples aged 12 to 18 years, the same author reported no overall significant relationships between reported exposure to alcohol advertising and alcohol consumption. However, teenagers who claimed that they used advertisements to make social comparisons between themselves and actors in the promotions did display a significant statistical relationship between advertising exposure and their own propensity to consume alcohol (Strickland, 1981, 1982, 1983, 1984).

Later research from the United Kingdom found that social and marketing factors were both related to young people's alcohol consumption habits, but whereas social factors were more powerfully linked to volume of consumption, advertising effects appeared to be restricted to impact upon level of consumption of specific types of alcoholic beverage, most particularly, cider and alcopops (Gunter, Hansen & Touri, 2009).

Longitudinal studies have been conducted to track whether there are links over time between patterns of exposure to alcohol advertising and the onset of teenage drinking (Anderson, de Bruijn, Angus, Gordon, & Hastings, 2009; Ellickson, Collins, Hambarsoomians, & McCaffrey, 2005). The importance of these studies is that they acknowledge that the effects of alcohol advertising might build cumulatively over time (Casswell, 2004). These studies have also generally measured a number of other social factors known to influence the onset of alcohol consumption. In the process, they have revealed that both mediated and non-mediated variables can underpin the onset of youth alcohol consumption. Some statistical evidence surfaced that advertising effects persisted even after controls were implemented for non-mediated

variables (e.g., parent, family and peer group influences) (Ellickson, Collins, Hambarsoomians, & McCaffrey, 2005).

In a wide-ranging review of research about alcohol advertising and consumption from longitudinal studies, Anderson et al (2009) concluded that there was evidence that early onset of alcohol consumption was linked to exposure to alcohol advertising. Close inspection of the 16 studies reviewed here revealed that the relationship between these variables was often quite weak and its veracity undermined by methodological weaknesses concerning the measurement of advertising exposure. One illustration of this last point derived from a survey of young US teenagers that derived exposure to alcohol advertising from claims of TV watching based on lists of program titles (Stacy, Zogg, Unger, & Dent, 2004). In essence, there was no direct measurement of exposure to alcohol advertising on TV here.

Although discovery of direct links between reported exposure to alcohol advertising and consumption onset among children and teenagers has been problematic, some researchers have explored the possibility that the link is less direct and operates through a mediating variable of recall of advertisements. Pursuing this line of argument, some studies have found that ability to recall alcohol advertisements and alcohol brands displayed statistical links to alcohol consumption (Stacy, Zogg, Unger, & Dent, 2004; Henriksen, Schleicher, Feighery, & Fortmann, 2008). Young adults who expressed greater liking for alcohol advertisements also exhibited heavier drinking tendencies (Casswell & Zhang, 1998; Wyllie, Zhang & Casswell, 1998). In another chain of influence, evidence has emerged among young people that exposure to alcohol advertisements is associated with greater liking of alcohol products and that the latter reaction in term is linked to drinking behavior (Unger, Schuster, Zogg, Dent, & Stacy, 2003).

Most survey research into advertising effects into alcohol consumption has relied upon self-report measures of advertising exposure. One US longitudinal study departed from this convention by also including market level data on advertising expenditure. Snyder (2006) constructed a nationwide panel of respondents aged 15 to 26 years at the outset and surveyed them four times over 21 months. Growth in drinking over time was found to be steepest not only among respondents who recalled most advertising exposure but also among those who resided in markets that experienced the greatest levels of expenditure on alcohol advertising. The latter effect was most pronounced for the older respondents.

Longitudinal research that comprised two surveys conducted two years apart among 12 to 15 year-olds in Scotland found that the youngsters' awareness of and involvement with different kinds of alcohol marketing (advertising, sponsorship, associated merchandising, point of sale displays and packaging) in the first wave predicted uptake of alcohol consumption and frequency of consumption in the second wave. This statistically significant relationship persisted after controls for other social variables were introduced (Gordon, MacKintosh & Moodie, 2010).

Recent reviews of longitudinal research have reached conflicting conclusions about whether there is compelling evidence for effects of alcohol advertising on drinking behavior among young people that emerge over time. Smith and Foxcroft (2009) excluded experimental studies, one-off surveys, and time series studies and focused on surveys that constructed panels that were interviewed on two or more occasions and which evaluated a range of advertising formats and behavioral outcome measures. Following extensive screening of research literature, seven studies were selected for inclusion – Connolly, Casswell Zhang & Silva (1994), Robinson, Chen & Killen (1998), Stacy, Zogg, Unger & Dent (2004), Van Den Bulck &

Beullens (2005), Ellicksen, Collins, Hambarsoomians & McCaffrey (2005), Snuyder, Milici, Sun & Strizhakova (2006), and Sargent, Wills, Stoolmiller, Gibson & Gibbons (2006).

Three of these studies (Robinson et al., 1998; Ellicksen et al., 2005; Sargent et al., 2006) were identified as showing significant degrees of association between onset of alcohol consumption among adolescents who were non-drinkers at the start and level of exposure to alcohol advertising. In two cases (Stacy et al, 2004; Van den Bulck & Beullen, 2005), exposure to TV or music videos (and by proxy to advertising they carried) or to alcohol advertising were related to amount of alcohol consumption over time. The reviewers conceded that although these findings were indicative of links between exposure to alcohol advertising and drinking onset or amount of drinking in adolescence, they did not prove causality and provided no explanation for these relationships.

A subsequent wide-ranging critique of longitudinal research that covered 20 studies into alcohol advertising and its effects upon young people concluded that evidence for causality between advertising exposure and consumption was questionable. Key weaknesses centered on measurement of advertising exposure and message reception, sample biases across survey waves, and effectiveness of controls for extraneous variables (Nelson, 2010b).

Experimental Studies

Findings from experimental studies have generally been restricted to demonstrations of whether exposure to alcohol advertising can have an immediate or short-term influence over choice of beverage. Experiments have so far provided few insights into the role played by mediated depictions of alcohol in triggering the onset

of alcohol consumption among children and teenagers (McCarty & Ewing, 1983; Kohn & Smart, 1984; Sobell, Sobell, Riley, Klajner, et al., 1986). Hence, experiments have found that inviting participants to engage directly with specific drinks by evaluating advertisements can produce a priming effect steering their choices towards advertised products in a choice test run immediately after exposure (e.g., Brown, 1978). Furthermore, exposure to advertisements for beer (in the case of young men and wine in the case of young women) via TV that were embedded in other program material encouraged more drinking in a controlled environment compared with conditions in which no alcohol advertisements were shown (Kohn & Smart, 1984, 1987).

Another study combined alcohol advertising and depictions of alcohol consumption in adjacent programming. In this instance, American college students were invited to evaluate programs they were shown and experimental conditions were manipulated for different groups of participants to vary exposure to alcohol-containing material. After the experiment, the participants were invited to take part in a different exercise which they were told was unconnected to the first. In this exercise, they evaluated an alcoholic beverage and could as part of that process consume it. No evidence emerged that the amount of alcohol consumed in this exercise differed significantly between students on the basis of their prior viewing experience (Sobell, Sobell, Riley, Klajner, et al., 1986).

In a follow-up investigation, Sobell et al (1993) used a similar alcohol representations exposure design but then questioned participants both before exposure and afterwards about their drinking behavior. The only result of significance and relevance here was that those who confessed before exposure to being heavy drinkers

reported subsequently that they experienced a lowered resistance to drinking heavily again if they had been exposed to alcohol promoting messages.

A slightly different twist was adopted by another experimental study in which participants were divided up according to whether they saw alcohol advertisements or not and whether or not they had been allowed to drink alcohol prior to advertising exposure. During an interval in the study, all participants were given an opportunity to drink alcohol. Breath tests comparisons for these groups showed higher levels of alcohol in the blood of those who had seen alcohol advertisement earlier. The data can be challenged on the grounds that breath test results are not always reliable indicators of alcohol consumed, because individuals can vary in levels of tolerance for alcohol. In addition, group level results could have been unduly influenced by one or two heavy drinkers and this factor was not controlled (McCarty & Ewing, 1983).

A field test in which participants were exposed to alcohol advertisements as part of an evaluation test were re-tested six to 12 weeks later via telephone. No differences in levels of alcohol consumption were found contingent upon whether or not they had evaluated advertisements for alcohol products earlier (Kohn, Smart & Ogborne, 1984).

In a design that again manipulated controlled exposure to alcohol advertisements, no effect was found on the degree to which pre-teens and early teens expressed an intention to drink themselves in the future (Lipsitz, Brake, Vincent, & Winters, 1993).

Some experimental studies have focused on non-marketing alcohol representations including depictions of consumption in TV programs. These studies

were conducted among pre-teenage and early teenage children and hence may have a more significant bearing on the role that such depictions could play in triggering an early interest in alcohol. One study found that pre-teenagers were more likely to choose to serve alcohol to an adult in a pictured scene as an appropriate behavior after having earlier watched a program that featured alcohol consumption (Rychtarik, Fairbank, Allen, Foy, & Drabman, 1983).

A similar design was used with pre-teenage children who were after exposure to videos depicting alcohol consumption scenes asked for their attitudes towards drinking. More positive a fewer negative opinions emerged among children who had watched videos with alcohol consumption than among those who had not (Kotch, Coulter & Lipsitz, 1986).

Further evidence has emerged from experimental research that exposure to alcohol advertisements could give rise to indirect rather than direct effects upon drinking-related behavior. In particular, these messages could trigger internalised attitudes towards drinking that in turn activate high risk dispositions such as driving while under the influence of alcohol (Goodall & Slater, 2010).

Qualitative Studies

There have been attempts made to understand how children respond to alcohol advertising through the use of qualitative research methods. These methods are not equipped to test causal hypotheses but can be useful to determine the significance of advertising for young people alongside other social factors related to alcohol consumption. This type of research has indicated that young people below legal drinking age do notice advertising for alcoholic beverages and discuss promotions as well as drinking in general among their friends. These discourses allow

youngsters to explore the social importance of alcohol consumption among their peer groups and to gauge attitudes towards it. Focus group research has demonstrated that exposure to alcohol advertising can induce positive emotional reactions to advertised brands among teenagers (Jones & Donovan, 2001). It is difficult to determine from qualitative evidence what specific impact exposure to alcohol advertising has upon the onset of drinking, but it is apparent that young people draw upon what they see in promotional campaigns for alcoholic products in their conversations about drinking with their friends (Cragg, 2004).

Further qualitative research that consisted of focus group interviews with teenagers and young adults in their early 20s in seven countries (Brazil, China, Italy, Nigeria, Russia, South Africa, and Scotland) revealed that alcohol and its consumption was defined by a variety of different cultural values and contexts that shaped how much drinking took place and the settings in which this typically occurred. No evidence emerged, however, that alcohol advertising or other forms of alcohol marketing was identified by young drinkers as a factor that influenced their orientations towards alcohol (Martinic & Measham, 2008a).

The evidence reviewed in this section has revealed that children and teenagers not only display an interest in alcohol marketing but that it is also linked to their recall of alcohol brands and their attitudes towards those brands and alcohol consumption. What is less certain is whether brand awareness and recall of advertisements are causal agents that drive the onset of alcohol consumption. Some correlational evidence surfaced from longitudinal surveys, but methodological weaknesses in the way drinking behavior and alcohol exposure were measured undermine the credibility of their findings. Direct attempts to demonstrate causal relations between advertising exposure and subsequent drinking behavior via

controlled experiments have yielded no clear evidence of behavioral effects and were, in any case, not equipped to prove any hypotheses by the impact of alcohol advertising on the onset of alcohol consumption. Evidence concerning the hypothesized impact of non-marketing mediated representations of alcohol consumption is also equivocal largely for the same methodological limitations that blight research into alcohol advertising effects.

What is also apparent is that if alcohol advertising does ultimately influence consumption, this process is more likely to be indirect than direct, operating via brand awareness and liking, or even via internalised cognitions about alcohol and its consumption. Even then, more work is needed to clarify the potency of such influences alongside the effects of non-mediated social and environmental factors. Some writers have argued strongly that when parental and peer group factors are taken into account, the influence of advertising exposure on alcohol consumption among young people is seriously weakened (Kinard & Webster, 2010).

6. Should Alcohol Advertising and Other Media Depictions of Its Use Be More Tightly Controlled?

There are ongoing concerns about under-age drinking and abuse of alcohol (Foxcroft et al., 2003; Roche, 2003). These concerns are reinforced by statements from the World Health Organisation (WHO) that confirm national statistics about the prevalence of under-age alcohol consumption and excessive consumption. In turn, the WHO has called for countries around the world to review and tighten up their regulatory controls over the sale, distribution and pricing of alcohol products and the way they are advertised (WHO, 1995, 2004). Concerns about under-age drinking have been echoed by medical authorities that have highlighted the short-term and longer-term health risk associated with early onset of alcohol consumption and regular

consumption to excess by young people. Among the solutions highlighted here is to place further restrictions of the way alcoholic products can be distributed and promoted (British Medical Association, 2008).

Governments have responded by tightening up licensing laws and encouraging regulators to review codes of practice relating to alcohol marketing. These actions have met with mixed success. Much depends on how far-reaching they are. The introduction of restrictions on the way alcoholic beverages can be advertised will have little impact if vendors are permitted to adopt competitive pricing practices that bring the cost of drinking within a range young people can afford. Furthermore, some retailers have treated alcohol as a loss leader to draw customers in and this can encourage teenagers to buy in bulk to fuel heavy drinking sessions. Social experiments with extended drinking hours are believed to pull drunks off the streets, but may instead have increased rates of excessive consumption and of other associated social problems (Chitritzh & Stockwell, 2002; Plant & Plant, 2006).

The alcohol industry has attempted to circumvent the implementation of tighter legislated restrictions on their marketing activities by engaging in self-regulation. They publish their own advertising and marketing codes of practice, often resonating closely with those operated by national regulators. Independent observations have criticised the effectiveness of self-regulation by industry (Hill & Casswell, 2004; Roberts, 2002; Saunders & Yap, 1991).

Concerns about the abuse and misuse of alcohol by young people, even before they reach adulthood, derive from the prevalence of alcohol-related illnesses and social disturbances. It would be wrong however to presume that because such negative social outcomes can derive from irresponsible consumption of alcohol that any media depictions or promotions of alcohol must also be labelled as inherently

bad. Ultimately, whether mediated representations of alcohol represent a problem in their own right must be judged according to whether robust empirical evidence exists to demonstrate unequivocally that they play a significant part in causing such behavior.

As the review of evidence provided in this chapter has indicated, research findings are not always clear cut. Empirical research, for example, about the impact of advertising and portrayals of alcohol use in the media has been dogged with methodological limitations in part linked to the intrinsic limitations of specific methods to demonstrate causality and in part to a failure on the part of researchers to build in adequate controls for the effects on drinking onset of non-mediated variables present in the social environments of young people. Such criticisms are not unique to research into the effects of alcohol-related advertising or media reports or portrayals. Nevertheless, they are particularly important in this context where the existing evidence is cited to support arguments for tighter restrictions to be placed on the marketing practices of legitimate businesses.

There is another issue that requires disentangling. Concern about alcohol consumption has frequently been grounded in an observation, or more often an assumption, that this behavior is on the rise. Closer inspection of relevant statistics reveals that this is not always true (Measham, 2007). Drinking trends have always fluctuated over time and it is important to be cognisant of such behavior patterns in deciding whether recent trends reflect a significant social change or part of a conventionally fluctuating cycle. Alcohol consumption has been observed to rise over different periods of time across the 19th and 20th centuries and during the earlier phases of this cycle mediated representations of alcohol were virtually absent (Plant & Plant, 2006).

Although average levels of alcohol consumption among children, teenagers and young adults may have flat-lined in many developed countries, increased rates of drinking to excess, in order to get drunk, have been observed. In the UK, for instance, drinking to get drunk has become culturally accepted as an appropriate behavior to adopt among teenagers and adults in their early 20s (Talbot & Crabbe, 2008). The success of a social event is often defined by the young in terms of how drunk they got (Engineer et al., 2003). Such abuse of alcohol does pose serious health risks for young people (Bonomo, Bowes, Coffey, Carlin, & Patton, 2004; Wells, Horwood & Ferguson, 2004). The attitudes displayed by young people regarding such behavior signal that health concerns rarely feature in their thinking. Alcohol marketers meanwhile have been accused of deliberately targeting young people with new products designed especially to appeal to this market category (Barnard & Forsyth, 1998; Measham & Brain, 2005). By making drinking more intrinsically appealing by creating products that appeal in particular to the taste preferences of under-age drinkers (i.e., sweet tasting beverages with high alcohol content), under-age drinking has been encouraged (Hastings & Angus, 2009).

It is not just the manufacture of specific products targeted at the taste bud preferences of the young that is at issue here. In many countries, medical authorities have accused alcohol manufacturers of using advertising themes that are known to appeal to the young (usually referring here to those below the legal drinking age), regardless of the type of product (Fortin & Rempel, 2005). Pressure has then been brought to bear on advertising regulators to introduce more restrictive codes of practice across all the major advertising media.

Many recent alcohol advertising code changes in this context have outlawed the use of themes such as social and sexual success, links with sport and the

use of very young looking actors. These changes have been informed by research findings that allegedly showed these factors to promote the attention of children and teenagers to alcohol advertisements (Hastings and Angus, 2009; Gunter et al., 2010). For some critics, these code reviews have not gone far enough (Hastings & Angus, 2009). It has been claimed, for example, that there are many other attributes not always covered by codes of practice for which research evidence has identified youth appeals (Nash, Pine & Lutz, 2000). Restrictions can also target the media location of alcohol advertising to reduce the likelihood of youth exposure. This action is not based on precise empirical evidence however. A magazine, for instance, might be primarily targeted at a young adult readership aged 21 and over, but still attract readers aged under 18 (Nelson, 2005). In addition, thematic restrictions may apply to one medium and not to another. So, the use of themes of social and sexual success may be restricted for advertising on television, but this regulation may not apply in the case of the internet (Carroll & Donovan, 2002).

In the context of the effectiveness of advertising restrictions and children and teenagers, it is important not to forget that youth traditionally rebel against authority especially when it places restrictions on their freedom to choose. This psychological reactance has been observed to influence people's behavior in a range of contexts (see Bushman & Stack, 1996; Krmar & Cantor, 1997). For young people, under-age alcohol consumption is psychologically wrapped up with a broader rebelliousness (Cragg, 2004). In relation to the sale of alcohol, previous attempts at restrictive social engineering in the form of prohibition failed to stop people from drinking and encouraged an active black market in production and consumption (Hall, 2010). This observation in respect of alcohol advertising restrictions has been reinforced by analysis of alcohol advertising bans across 17 developed countries that

indicated no reduction in consumption levels following the introduction of such bans (Nelson, 2010a).

Evidence has emerged among teenagers themselves that the effectiveness of code of practice restrictions has begun to bite. In one analysis, young people in the UK continued to like alcohol advertisements, but in 2007 fewer felt that these promotions were aimed specifically at them compared with in 2005 (Ofcom, 2007). Despite this observation, other audits have detected code of practice violations in print and televised advertising of alcohol (ASA, 2007; Donovan, Donovan, Howat, & Weller, 2007). Other studies found broad compliance with code of practice rule changes in respect of television advertising of alcohol, though some additional evidence that the spirit if not the letter of the law was being stretched by some advertisers (Gunter, Hansen & Touri, 2008).

7. Conclusion

While the task of providing clear-cut research evidence on the effects of mediated depictions of alcohol and drinking on public beliefs, perception, attitudes and behavior in relation to alcohol and alcohol consumption will continue to present a challenge – in this as in so many other areas of research concerned with the role of media and communication in society – to researchers, our review shows that much has been achieved over the last three decades in terms of advancing our understanding of the role played by mediated representations of alcohol. Key to this is the recognition – backed up by the now voluminous body of research on the representation of alcohol and drinking across a wide range of media and media-genres – that our cultural and symbolic environment is saturated with images of alcohol and drinking that are largely positive, showing alcohol as a normal, unproblematic and integral part of

successful lifestyles and pleasant social interaction, while much less frequently drawing attention to the potential problems associated with excessive drinking.

The cumulative research evidence moreover shows that symbolic and mediated representations of alcohol and drinking are not a simple or neutral ‘reflection’ of social and cultural values associated with drinking, but are of course subject to the continuous and active influence and manipulation by a wide range of - diverse and often directly opposed – interests representing different social, political and business agendas. The sheer social, cultural and symbolic pervasiveness of alcohol makes it difficult to disentangle the contribution of individual media representations – whether in alcohol advertising, wider forms of marketing, news media reports or entertainment media portrayals – to public beliefs and practices with regard to alcohol and drinking.

Our review of research shows that significant headway has been made in terms of mapping the extent and nature of mediated representations of alcohol, not just in advertising, but importantly, in the much wider media environment, including in entertainment media content. Considerable progress has been made also in terms of providing a more nuanced and differentiated understanding of how and where alcohol-related (mediated) messages appear, and which population groups are targeted and/or exposed to these messages. In other words, significant progress has been made towards mapping the contours of the mediated message environment regarding alcohol and, hence, towards identifying where potential effects or influences of media messages about alcohol may or are likely to occur. Our review of research approaches and research evidence on the impact of mediated messages about alcohol on (young) people’s beliefs, perception and behavior regarding alcohol and its uses confirms the complex theoretical, conceptual and methodological challenges which continue to

confront research on media influence/effects: particularly, the review confirms, that research evidence has established significant and extensive correlations between exposure to media messages and alcohol consumption and beliefs, but has generally failed to demonstrate causality.

Our review has identified a number of areas and issues that will merit further development, improvement and research attention, and we finish by listing these:

- The increasing convergence of older (print and broadcast media) and newer media (online communication, the internet, mobile phone technologies) brings significant changes and opportunities/possibilities to the ways in which messages, information, values and meanings associated with alcohol and its uses are constructed, manipulated and communicated. Research urgently needs to begin to catch up with the fast-paced changes that are already taking place in this regard. This would include research on e.g. the ways that companies and advertisers utilise the new media environment for marketing and promotion; exposure to and interaction with new media environments and communication about alcohol; alcohol-related messages and communication in social media such as MySpace and Facebook.
- Under the banner of ‘new media’ we also need better understanding of how young people engage with new technologies and their use as promotional tools involving qualitative and observational research techniques. This is essential to distinguish between the different forms of engagement with alcohol products that are feasible via these technologies so that they can be effectively represented in multi-variate research designed to understand their particular role, alongside other potential causal factors, in shaping alcohol-related habits

- Better (systematic, consistent and regular) monitoring of alcohol promotion and marketing across different media and genres, including monitoring of adherence to relevant voluntary or statutory codes regarding the extent/content of alcohol-messages and the target/actual audiences for such media, genres and messages.
- More comprehensive survey research into the influence of alcohol advertising and media-related portrayals on the onset of drinking. This means surveys that undergo extensive pre-testing to ensure that a more comprehensive range of potential causal factors in relation to the onset of drinking - social, psychological and mediated variables – are identified and effectively measured. Measures should be constructed to permit complex multivariate modelling.
- Better theoretically informed research that includes effective measurement of cognitive and affective measures of reactions to alcohol advertisements and media portrayals and of how these pre-behavioral response measures mediate eventual behavioral responding.

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