



The University of  
**Nottingham**

**TOBACCO AND ALCOHOL IN FILMS AND ON TELEVISION**

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# **Abstract**

## **Background**

Evidence from other countries suggests that tobacco and alcohol episodes are common features in popular films and popular television programmes. There is strong evidence to suggest that the exposure of children and young people to smoking and other tobacco related imagery in films increases smoking experimentation and initiation, and there is some evidence to suggest that alcohol use and related alcohol content in films and on television has a similar effect of current and future drinking behaviours among children and young people. To date there has been no previous research on the occurrence of tobacco and alcohol content in films popular in the UK, and there is no up-to-date evidence on the occurrence of tobacco and alcohol content of prime-time television programmes in the UK. For these reasons, the occurrence of tobacco and alcohol in films popular in the UK and on prime-time television broadcast in the UK are documented and investigated here.

## **Methods**

### **Films**

The 15 most commercially successful films each year at the UK cinema box office from 1989 to 2008 were viewed and coded for tobacco and alcohol episodes and branding, including; *tobacco use, tobacco paraphernalia, inferred tobacco use, tobacco brand appearances, actual alcohol use, inferred alcohol use, other alcohol references* and *alcohol brand appearances*. These episodes were measured using five-minute interval coding whereby each five minute period of

film was coded as positive, or negative, for each category of tobacco or alcohol episodes listed above if at least one such incident occurred during the five minute period. The codes were then analysed using both Excel and Stata.

## **Television**

Prime-time television on the five main national free-to-air channels available for viewing without a cable or satellite connection or subscription in the UK (*BBC1, BBC2, ITV1, Channel 4, Channel 5*) were recorded for seven days from Monday to Sunday on three occasions four weeks apart. The recordings were then coded for the presence, or absence of tobacco and alcohol episodes; *actual tobacco use, implied tobacco use, tobacco paraphernalia, other reference to tobacco, tobacco brand appearances, actual alcohol use, implied alcohol use, other alcohol reference, and alcohol brand appearances* using one-minute intervals, whereby each one minute period of television broadcasting was coded as positive, or negative, for each category of tobacco or alcohol episodes if at least one such incident occurred during the one minute period. The codes were then analysed in Excel.

## **Results**

### **Film**

The 300 films totalled 582.8 hours of film time, with a mean of 116.7 minutes. Most films were classified by the BBFC as PG, 12/12A or 15, and most films were produced by or in partnership with US producers, but UK producers were involved in 20% of films. The 15 most popular films typically accounted for about

50% of each year's gross UK cinema box office takings. There were nearly seven thousand five-minute intervals coded, with a mean of 23 per film.

Tobacco episodes occurred in 17% of all intervals, and in 210 (70%) films; 68% of all youth rated films. Tobacco episodes occurrence, in total or any category except branding, was unrelated to country of origin or genre of film. The occurrence of all tobacco episodes fell substantially between 1989 and 2008; similar trends occurred for all categories of tobacco interval, except for branding. Tobacco use, predominantly cigarette smoking, occurred in 59% of all films, 92% of the films containing tobacco use were in BBFC 15 and lower categories, and more than half in BBFC 12/12A and lower categories. Brand appearances were most common in BBFC category 15, and 82% were certified as suitable for viewing by those under 18. Individual brand appearances were most commonly either *Marlboro* or *Silk Cut*.

At least one alcohol appearance occurred in 86% of films, at least one episode of alcohol branding in 35%, and nearly a quarter (23%) of all intervals analysed contained at least one appearance of alcohol. The occurrence of alcohol use and branded alcohol appearances was particularly high in 1989, but the frequency of these and all other appearance categories changed little in subsequent years. Most films containing alcohol appearances, including 90% of those including alcohol brand appearances, were rated as suitable for viewing by children and young people. The most frequently shown brands were American beers: *Budweiser*, *Miller* and *Coors*.

## Television

The 420 hours of recorded broadcasting comprised 613 programmes and 1,121 advertisements/trailers, and included 25,210 part or full one-minute intervals, of which 21,996 were from programmes and 3,214 from advertisements/trailers. Channel 5 broadcast a total of 166 different programmes; BBC1 broadcast 120, BBC2 116, Channel 4 109, and ITV1 103. Documentaries (161), news programmes (139) and soap operas (72) were the most frequently shown genres.

Tobacco imagery occurred in 210 of 613 broadcast programmes (34%), and in more than half of all feature films, reality TV, and comedy programmes. Actual tobacco use, predominantly cigarette smoking, occurred in 73 (12%) programmes, and particularly in feature films and reality TV. Tobacco brand appearances were rare, occurring in only 18 programmes, some of them news or other factual genres, but six of which were episodes of the same British soap opera, *Coronation Street*. Most prime-time tobacco imagery was broadcast before the 9pm watershed.

Alcohol was commonly portrayed in prime-time terrestrial television programmes broadcast in the UK, with any alcohol in 52% of programmes, and alcohol was depicted in 37% of advertisements/trailers. For the programmes that contained alcohol, differences were seen in the proportions of alcohol depending on genre; any alcohol was most commonly found in soap operas, feature films, sport, and comedy genres, while actual alcohol use was common in both soap operas and feature films. Proportionally, alcohol branding was as commonly seen in advertisements/trailers (20%) as programmes (21%). Alcohol brands were most commonly depicted in sports programmes, news, and soap operas, with the most frequently depicted brands being *Heineken*, followed by *Budweiser* and *Carlsberg*.

## **Conclusion**

Tobacco and alcohol imagery and other content are common in the most commercially successful films at the UK box office and in free-to-air terrestrial prime-time television broadcasting in the UK. Tobacco and alcohol are more common in feature films than in television broadcasting, and alcohol content is far more pervasive in both films and on television than tobacco content is. Given the existing evidence of the effects of on-screen smoking and drinking on youth behaviours, measures need to be implemented to limit or restrict the depictions of these substances in films and television frequently accessed by children and young people.

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## Statement of contribution

Ailsa Lyons undertook this research for the degree of Doctor of Philosophy, under the supervision of Prof. John Britton and Prof. Ann McNeill. The original outline proposal for the PhD was written by Prof. John Britton and Prof. Ann McNeill. Ailsa Lyons undertook the review of the existing research, identified the appropriate methods to use, and designed the studies. The data were collected, coded and analysed, and the results were interpreted and written up by Ailsa Lyons. Both John Britton and Ann McNeill gave advice and guidance throughout the entire PhD process, in preparing the manuscripts for publication, and on the thesis. Yilu Chen advised on the data analysis is the first paper published *Tobacco and tobacco branding in films popular in the UK 1989-2008*, while Professor Ian Gilmore gave comment on the discussion in the *Alcohol imagery and branding, and age classification of films popular in the UK* paper.

## List of published papers

Lyons, A, McNeill, A, Chen, Y, & Britton, J. Tobacco and tobacco branding in films popular in the UK 1989-2008. *Thorax*. 2010; 65:417-22.

Lyons, A, McNeill, A, Gilmore, I, & Britton, J, Alcohol imagery and branding, and age classification of films popular in the UK. *International Journal of Epidemiology*. 2011. [e-published ahead of print 5thSept 2011]

Lyons, A. & Britton, J. Protecting young people from smoking imagery in films: whose responsibility? *Thorax*. 2011;66(10):844-6.

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## Abbreviations

ASA – Advertising Standards Authority  
ASH – Action on Smoking and Health  
AUDIT - Alcohol Use Disorders Identification Test  
BARB – Broadcasters Audience Research Board  
BAT - British American Tobacco  
BBFC – British Board of Film Classification  
CAGE – Cutting down, Annoyance by criticism, Guilty feeling, and Eye-openers  
COPD - Chronic Obstructive Pulmonary Disease  
DALYs - Disability-Adjusted Life Years  
DCMS – Department of Culture, Media, and Sport  
DoH – Department of Health  
DVD – Digital Video Disk  
EC – European Commission  
EU – European Union  
FCTC - Framework Convention on Tobacco Control  
FDA – Film Distributors Association  
GHS – General Household Survey  
GLS – General Lifestyle Survey  
IAS - Institute of Alcohol Studies  
IMDb - Internet Movie Database  
IPA - Institute of Practitioners in Advertising  
IR – Interval Recording  
JTI - Japan Tobacco International  
MAR – Misleading Advertising Regulations  
MSA - Master Settlement Agreement  
NHS - National Health Service  
NICE - National Institute for Health and Clinical Excellence  
Ofcom – Office of Communications (Independent regulator and competition authority)  
PACT – Producers Alliance for Cinema and Television  
PM - Philip Morris  
RCP - Royal College of Physicians  
RTA - Road Traffic Accident  
SADQ - Severity of Alcohol Dependence Questionnaire

SES – Socio Economic Status

TAPA - Tobacco Advertising and Promotions Act

TBA – Tobacco Brand Appearances

TSM- Time Sampling Measurement

TV – television

UK – United Kingdom

UKCBO - United Kingdom's Cinema Box Office

UKFC – United Kingdom Film Council

US – United States of America

WHO – World Health Organization

## **Chapter 1: Background information**

## **1.1 Tobacco background**

### ***1.1.1 Health impact of smoking and tobacco use***

Tobacco use is the leading cause of preventable deaths throughout the world, and is responsible for nearly five million deaths worldwide each year<sup>1</sup>. If current trends are to continue, by 2020 it is estimated that 10 million deaths per year will be attributable to its use<sup>1</sup>. Within the European Union (EU), tobacco use accounts for around 15% of all deaths and is the leading cause of preventable diseases and premature deaths<sup>2</sup>. It is suggested that in Europe as many as 13 million people are suffering from a serious chronic disease as a result of smoking<sup>3</sup>. The majority of tobacco use in the United Kingdom (UK) is cigarette smoking<sup>4-6</sup>. Currently (2009), in England approximately 80,000 deaths each year are attributable to tobacco use<sup>7</sup>. The majority of smoking (including cigarette, cigar, and pipe smoking) related deaths are due to respiratory diseases<sup>8 9</sup> such as lung cancer<sup>10-13</sup>, chronic obstructive pulmonary disease (COPD)<sup>14</sup>, and pneumonia<sup>15</sup>, with the remainder being from cardiovascular disease<sup>16-18</sup>, other forms of cancer<sup>9</sup>, and circulatory and digestive diseases<sup>19</sup>.

Not only can smoking have massive direct detrimental effects on the individual smoker, but also a huge negative impact on others around the smoker, on wider society, and the economy in general. For example, smoking during pregnancy can be harmful to the unborn child<sup>20 21</sup>, and a report from the Royal College of Physicians (RCP) published in 2010 acknowledged that in the UK passive smoking among children resulted in more than 300,000 visits to their general practice, and about 9,500 hospital admissions each year<sup>22</sup>. Also, passive smoking increases the risk of cancer<sup>23</sup> and ischemic heart disease in non-smokers<sup>23 24</sup>.

### **1.1.2 Cost of smoking**

In 2009, Allender *et al*<sup>25</sup> estimated for the year 2005-2006 that smoking was directly responsible for costing the NHS £5.2 billion in the UK, not including indirect costs, passive smoking, or conditions associated with smoking outside of those for which the WHO Burden of Disease Study calculated population attributable fractions. In Scotland, smoking-related loss of productivity has been estimated to cost employers £450 million annually (e.g. cost of taking cigarette breaks), and an additional £40m annually from smoking-related absences from work<sup>26</sup>. In England and Wales, it has been estimated that 34 million work days are lost each year because of smoking related ill health<sup>27</sup>. The additional costs employers incur are for such things as increased sickness absence due to higher levels of illness, lower productivity, and the cost of hiring temporary staff to cover absences from work<sup>26</sup>.

The financial cost of smoking to individual smokers can also be considerable, particularly for those earning low incomes. In the 2008 *General Lifestyle Survey*<sup>6</sup> which shows that those classified as being from manual occupational groups, lower socio-economic status (SES) (and typically lower incomes), have a higher smoking prevalence (27%) than those from non-manual occupational groups, higher SES (and typically higher incomes), whose smoking prevalence is recorded as 16%. As the prevalence of cigarette consumption is typically higher for those on lower incomes, it implies that a greater proportion of the households overall income is spent on tobacco and cigarettes, leaving less money available for spending on other things. According to the Tobacco Manufacturers Association in 2010 the cost of an average packet of cigarettes, based on the average recommended retail price of a typical pack of 20 cigarettes in the most popular price category, was £6.28<sup>28</sup>. This suggests that the average

20-a-day cigarette smoker spends approximately £43.96 a week, £175.84 a month and more than two thousand pounds a year, on cigarettes.

### **1.1.3 Tobacco use and nicotine addiction and dependence**

A 2000 report from the RCP, *Nicotine addiction in Britain*<sup>8</sup> concluded that the nicotine contained in, and delivered through, tobacco smoking fits the already existing criteria set out to define what constitutes the classification of an addictive substance (*"a strong desire to take the drug, substance taken in larger amounts or for longer than intended, difficulty in controlling use, considerable time spent obtaining, using or recovering from the effects of the substance, a higher priority given to drug use than to other activities or obligations, continued use despite known harmful consequences, increased tolerance, and painful withdrawal"*)(pp 84-87)<sup>8</sup>. This classification of nicotine in tobacco as an addictive substance was first indicated in a report for the US Surgeon General in 1988<sup>29</sup>.

Most smokers begin to smoke when they are young, and do so for various reasons (see further explanation below, **1.1.5 Young people and smoking initiation**), however nicotine addiction is the main reason that people continue to smoke once they have become established smokers<sup>30</sup>, and it has been found that some children experimenting can become addicted very quickly<sup>31-33</sup>. It is suggested that young people move along a continuum from experimenting with their first cigarettes, to occasional smoking, to daily smoking, then to heavier daily smoking and, finally to established smoking and dependence<sup>34-36</sup>.

It has also been estimated that as many as 70% of current smokers want to stop smoking<sup>37</sup>. Jarvis<sup>38</sup> acknowledges that nicotine addiction is highly complex and that pharmacological factors are only a part of a broader

explanation of uptake, continued use, and addiction, with other influential factors being social, economic, personal and political. Smoking, as well as other tobacco use, has sometimes been described as a form of self-medication<sup>8</sup> where smoking tobacco delivers the drug nicotine and alleviates the symptoms of nicotine withdrawal, meaning that the smoker is continuing to smoke because of their dependence on nicotine.

The nicotine in tobacco works by rewarding the smoker for their smoking behaviour causing this behaviour to be repeated for continued reward<sup>30</sup>. When a smoker inhales on a cigarette, nicotine is absorbed very quickly from the lungs into the bloodstream, and carried to the brain within about 20 seconds<sup>8 30</sup>. Nicotine has been described as both a stimulant and a depressant and has numerous effects on the human body<sup>38</sup>. The key effects are mediated through stimulation of nicotinic acetylcholine receptors (nAChRs) in the central nervous system of the neurotransmitter dopamine in the nucleus accumbens and other parts of the dopamnergic reward pathway. This is considered the main reason why established smokers continue to smoke<sup>30 38</sup>.

#### ***1.1.4 Trends in smoking (adults and young people)***

The 2008 General Lifestyle Survey<sup>39</sup> estimates that in Great Britain just over a fifth of those aged 16 and over are current cigarette smokers, with slightly more men than women smoking (Male 22% + Female 20% = Overall 21%)<sup>39</sup>.

In 2009 the prevalence of smoking in England in 11-15 year olds was 6%<sup>40</sup> with a more marked gender difference prevalence being 7% for girls and 5% for boys<sup>40</sup>. However these figures also differ, and increase, with age and by the age of 15, 15% of these young people are regular smokers, while only 0.5% of

11 year olds are regular smokers<sup>40</sup>. One out of every two regular smokers will die as a result of their continued smoking<sup>9</sup>, and on average will die 10 years earlier than if they had never smoked<sup>9</sup>.

### **1.1.5 Young people and smoking initiation**

The majority (90%) of smokers become addicted in their teens<sup>41</sup>, and most young smokers report that they want to stop<sup>37 42 43</sup>. It has been suggested by Jarvis<sup>38</sup> that young people first start to smoke predominantly for psychosocial reasons such as perceiving it to be an aspirational adult behaviour, or else as a rebellious act. Others<sup>38 44-48</sup> further suggest that young people are more likely to smoke if they come from backgrounds that favour smoking, such as having parents, siblings or peers that smoke; while Lynch and Bonnie<sup>49</sup> suggest that this influence extends to anyone the adolescent admires, including people such as film stars and other celebrities<sup>50 51</sup>. Additionally, West and colleagues<sup>52</sup> found that, as well as a strong influence in early adolescence (ages 15/16), friends influenced smoking uptake by up to three times between the ages of 18 and 21, especially around the time of school-leaving, when friendship groups often change.

Others<sup>44 53 54</sup> have found that living in low income households and in deprived areas further increase smoking initiation at early ages. In addition, Morgan *et al*<sup>55</sup> identified pupils who were disengaged with their school, and had a low sense of belonging at school, to be more likely to smoke than those who were more interested in school and possessed a higher sense of belonging at school. Tyas and Pederson<sup>56</sup> undertook a review of the psychosocial factors related to adolescent smoking in 1998, which showed that young people who started to smoke and continued to smoke identified with smoking as a method of

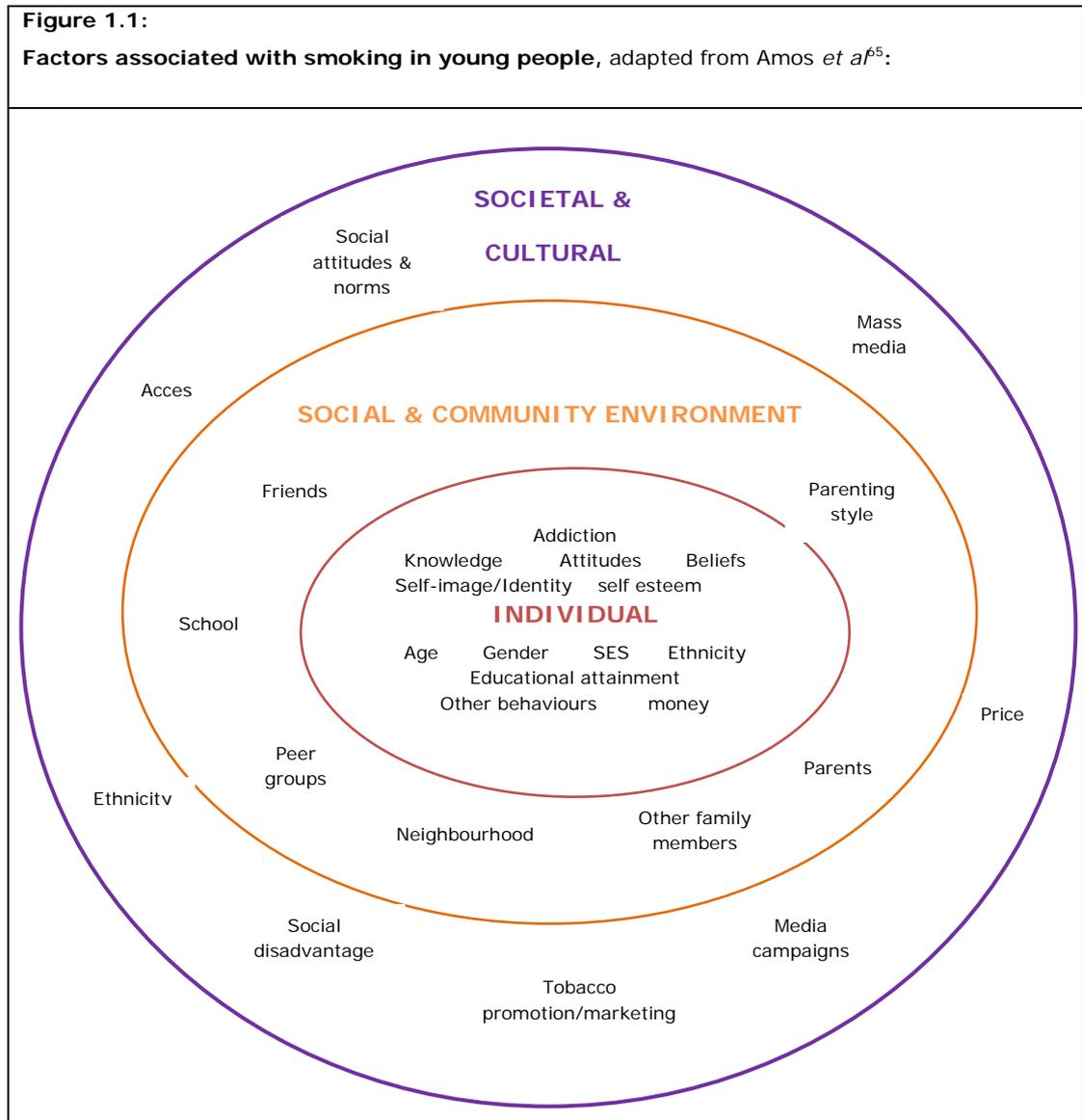
coping. Other researchers<sup>57 58</sup> have suggested that social identity and self-esteem can further influence smoking behaviours in adolescents. There are many reasons that children experiment with smoking for the first time, and to children and young people, smoking is predominantly a social and group activity<sup>59</sup>.

Researchers have also shown that exposure to direct advertising increases the likelihood of experimenting with tobacco, encourages smoking initiation amongst young people<sup>60-62</sup>, and predicts established smoking later on in young adulthood<sup>63</sup>. However, in the UK, tobacco advertising, promotion and sponsorship are currently heavily restricted by the Tobacco Advertising and Promotions Act (TAPA) 2002<sup>64</sup>, which leaves very few opportunities for tobacco companies to promote their products or raise individual brand awareness. This will be discussed in more detail in the following chapter (**2.Tobacco and alcohol in the media**).

Amos *et al*<sup>65</sup> undertook a review of young people's smoking in England which classified three differing levels of influence on young people's smoking, for both smoking uptake and continued smoking. These three levels were *individual* (socio-demographic, attitudinal, and behavioural), *social and community environment* (family, friends and school), and *societal and cultural* (access, media, social norms and marketing). These researchers<sup>65</sup> developed a summary diagram depicting how these main factors influenced the uptake and maintenance of smoking among young people (**Figure 1.1**).

There are various reasons as to what attracts and motivates children and young people to begin experimenting with smoking, and research has shown that the addictive nature of nicotine can take over very quickly. McNeill<sup>31</sup> found that because inhalation occurred early on in smoking experimentation, it was an indication that the pharmacological mechanisms of nicotine are likely to begin to

reinforce smoking early on. DiFranza *et al*<sup>33</sup> supported this finding and suggested that the first symptoms of nicotine dependence can appear before the onset of daily smoking, and within days or weeks of the initial onset of occasional smoking.



It is widely acknowledged that smoking and other tobacco use on-screen in popular films as well as in television programming can normalise smoking,

increase youth experimentation with tobacco products, promote adolescent smoking initiation, and ultimately increase established smoking in young adults<sup>50 66-79</sup>. The influence that tobacco use in film and television has on youth smoking behaviour will be further discussed in **Chapter 2**.

### **1.1.6 Tobacco public health policy**

#### **1.1.6.1 Tobacco Control policy**

Globally, the World Health Organization (WHO) first made tobacco control a worldwide public health priority through a series of strategies beginning in 1995<sup>80</sup>. Following this, initial discussions on the WHO's *Framework Convention on Tobacco Control* (FCTC) began in 1999, and were completed in 2003<sup>80</sup>, with the convention formally coming into force in 2005. In 2003 the European Commission (EC) and all European Union (EU) member states signed this treaty encouraging each of the member countries to implement the key elements outlined within it. These key elements included the imposition of restrictions on tobacco advertising, sponsorship and promotion, the establishment of rules for new packaging and labelling of tobacco products, including appropriate health warnings being placed on packets of cigarettes and other tobacco product packaging, and finally the implementing of clean indoor-air controls<sup>81</sup>. The EU itself provided legislative measures giving guidance ("directives") for member states on how to combat tobacco use and ultimately its effects on health<sup>82</sup>.

Within Britain, *Smoking Kills* (1998)<sup>41</sup> was the first Public Health White Paper published specifically and exclusively on tobacco. In this document the main objectives were highlighted as being to reduce the prevalence of young smokers and to aid current smokers to stop smoking, with particular attention

paid to reducing the numbers of women smoking during pregnancy. The document suggested this could be done using methods that have proved successful in other countries, with the emphasis being on the use of a variety of integrated measures.

This 1998 document was followed up in 2004 with a second Public Health White Paper, *Choosing Health: Making Healthier Choices Easier*<sup>83</sup>. This document focused on the need to tackle health inequalities and reiterated the importance of reducing the number of smokers by making this one of the six key public health priorities identified within the paper. Also, a number of important new points related to tobacco smoking were added, including the need to protect those non-smokers who are exposed to the detrimental effects of tobacco smoke, and the necessity to enforce the prohibition of under-age tobacco sales.

The following year (2005) the government published a three year plan *Delivering Choosing Health: making healthier choices easier*<sup>84</sup>, which gave details outlining the key steps necessary to fulfil the original *Choosing Health* objectives. This included clear priorities for delivery at national, regional and local levels, as well as measurable targets (such as "reducing exposure to second-hand smoke" by the end of 2007).

Legislation mandating smoke-free workplaces and public places came into force in July 2007 under the 2006 *Health Act*<sup>85</sup>, and has prevented smoking in all enclosed indoor workplaces and public places, with few exceptions (e.g. prison cells and, performers smoking during a performance, if it is considered necessary for the artistic integrity of that performance). The primary aim of smoke-free environments is to protect non-smokers from second hand smoke, and in addition to this however, creating smoke-free environments through the implementation of smoke-free policies and legislation has been found to both

reduce overall smoking rates and to reduce the consumption levels of those who continue smoking<sup>86</sup>. Further to this the *Smokefree England - one year on report*<sup>87</sup> not only suggests high compliance with (over 98%) and high support for (80%) the smoke-free legislation<sup>88</sup>, but also suggests a positive health impact through improved air quality in bars, more supportive environments for smokers making attempts to quit, and de-normalising smoking.

In October 2007, in a bid to prevent young people starting to smoke the age at which a person could legally purchase cigarettes increased from 16 years to 18 years<sup>89 90</sup>. As well as this, since the publication of *Smoking Kills* (1998)<sup>41</sup>, other public health measures have been taken to reduce tobacco smoking and smoking uptake amongst young people. These measures have included national social marketing campaigns (e.g. the *Smokefree* campaign<sup>91</sup>) to provide advice and guidance on stopping smoking (2008)<sup>91 92</sup>, and the development of best practice guidelines for National Health Service (NHS) Stop Smoking Services (2009)<sup>93</sup>.

In 2008, the Department of Health published *Excellence in tobacco control: 10 High Impact Changes to achieve tobacco control*<sup>94</sup> highlighting 10 evidence-based recommended priorities for an effective and comprehensive future for tobacco control in England (**table 1.1**, below), with the main priority being focused on reducing overall smoking prevalence. Included in this report are recommendations for delivering these changes systematically and at local levels. One of these high impact changes, "*Helping young people to be tobacco free*", acknowledges that, although traditional educational approaches may be educating young people in the dangers surrounding smoking, they are not currently successful in influencing their decisions to smoke, or rather decisions not to smoke. This priority focuses on the need to de-normalise smoking as a

habit with strategies that facilitate shifts in behaviour and attitudes, and not just increase knowledge.

This 2008 report also cites Liverpool's *D-MYST's Toxic movie campaign*<sup>95</sup> as innovative work, (replaced by D-MYST's *SmokeFree Movies Campaign*) which was initially launched in 2008. D-MYST describe themselves as a movement led by and for young people in Liverpool<sup>95</sup> with the purpose of providing a platform for young people to air their views and concerns on tobacco and to take action towards de-normalising and de-glamorising smoking through awareness raising, through campaigning for smoke-free environments, and campaigning for the exclusion of smoking and the placement of tobacco products from the media. *SmokeFree Movies*<sup>96</sup> is one of their campaigns aiming to remove smoking from youth rated movies.

<b>Table 1.1:</b>	
<b>The 10 High Impact Changes to achieve tobacco control, Adapted from DoH<sup>94</sup>:</b>	
<b>1.</b>	Agencies to work in partnership
<b>2.</b>	Gather & use the full range of data to inform tobacco control
<b>3.</b>	Use tobacco control to tackle health inequalities
<b>4.</b>	Deliver consistent, coherent and co-ordinated communication
<b>5.</b>	Provide an integrated stop smoking approach
<b>6.</b>	Build & sustain capacity in tobacco control
<b>7.</b>	Tackle cheap & illicit tobacco
<b>8.</b>	Influence change through advocacy
<b>9.</b>	<b>Help young people to be tobacco free</b>
<b>10.</b>	Maintain & promote smokefree environments

The *Excellence in tobacco control* report<sup>94</sup> also makes particular reference to NICE Guidelines (published in the same year) on preventing the uptake of smoking in children, *Mass-media and point-of-sales measures to prevent the uptake of smoking by children and young people*<sup>97</sup>. These NICE guidelines focus

on giving an evidence-base to mass-media and point-of-sale measures for preventing smoking. These guidelines recommend that these mass-media and point-of-sales measures should be combined with other prevention activities such as price and regulation policies, education programmes, cessation services, and community programmes as part of an overall comprehensive tobacco control strategy.

#### **1.1.6.2 Recent Tobacco Control policy**

*A Smokefree Future, A comprehensive Tobacco Control Strategy for England*<sup>98</sup> was published in 2010 with three main aims, the first being to stop the recruitment of young people as smokers. A target was to reduce the smoking rate among 11-15 year olds to 1% or less, and among 16-17 year olds to 8% by 2020. Reference is also made in this document to a need to limit exposure to tobacco use in the media. This need is further acknowledged in this Department of Health's strategy paper, which states that "*smoking is often depicted in glamorous ways in films, TV programmes and computer games*" (p 39)<sup>98</sup>.

In *A smokefree future* reference is made specifically to the emerging evidence that shows that children who are exposed to images of smoking in films are at increased risk of taking up smoking themselves. It also recognises that Ofcom (the communications regulatory body which is both industry and government funded<sup>99</sup>, and who work under UK Communications Act 2003<sup>100</sup>) has established some clear health guidelines<sup>101</sup>. The 2010 Department of Health tobacco control strategy document, *A smokefree future*, also advocates the need for this broadcasting code to be extended to other media, in particular film.

The other two priorities within this 2010 document are to motivate and assist every smoker to quit, and to protect families and communities from tobacco-related harm<sup>98</sup>. To motivate and assist smokers to quit, it has been suggested that there is a need for such things as an increase in the number of assisted quit attempts and those accessing NHS stop smoking services, and an increase in the targeting of groups where smoking prevalence is higher. To protect families and communities from tobacco-related harm it was proposed that collaboration and partnership between local partners to encourage people to make their homes and cars smoke free, to target interventions, and to implement equal access to such health interventions for those with mental illnesses, are all part of what's necessary to protect families and communities from tobacco-related harm.

In March 2011, following the general election in 2010, the government published *Healthy Lives, Healthy People: A Tobacco Control Plan for England*<sup>102</sup> following on from the 2010 Public Health White Paper *Healthy Lives, Healthy People: Our Strategy for Public Health in England*. This tobacco control plan sets out what the coalition Government will do to reduce tobacco use over the following five years and aims to promote comprehensive and evidence-based tobacco control in local communities. Within this document no predefined targets were set, but rather ambitions were highlighted. One of the ambitions outlined is to reduce smoking prevalence among young people in England to 12 per cent or less by the end of 2015. Also, within this document stopping the promotion of tobacco is highlighted as a priority, it acknowledges the tobacco industry uses entertainment media, and a commitment is expressed that the government work with media regulators and the entertainment industry around the portrayal of smoking in entertainment media<sup>102</sup>.

## 1.2 Alcohol Background

### 1.2.1 Health impact of alcohol use

Worldwide alcohol use results in about two and a half million deaths (3.8% of total mortality)<sup>103 104</sup>, and the World Health Organization (WHO) believes that hazardous and harmful use of alcohol has now become one of the most important risks to health<sup>105</sup>.

Alcohol use causes the loss of nearly 70 million Disability-Adjusted Life Years every year (DALYs; a method developed by the WHO for measuring and comparing overall disease burden)<sup>103</sup>, 4.5% of the total DALYs<sup>106</sup>. Unintentional injuries alone account for about one third of alcohol-related deaths, while neuro-psychiatric conditions account for close to 40% of the 70 million DALYs lost<sup>106</sup>. Alcohol is the leading risk factor for death for men aged between 15 and 59<sup>104</sup>. The WHO acknowledges a causal relationship between alcohol consumption and more than sixty different types of diseases and injuries<sup>106</sup>, and the adverse health and social consequences which occur as a result of intoxication (drunkenness), dependence (habitual, compulsive and long-term drinking), and other biochemical effects<sup>106</sup>.

The negative effects of alcohol use have long been established and are linked to premature death from injury, as well as mortality and morbidity resulting from harm, illness and disease. The WHO estimates that worldwide alcohol misuse and abuse causes between 20 and 30 percent of oesophageal cancer, liver cancer, liver cirrhosis, and epilepsy<sup>106</sup>, and it can also cause and

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† The WHO states that “one DALY can be thought of as one lost year of ‘healthy’ life. The sum of these DALYs across the population, or the burden of disease, can be thought of as a measurement of the gap between current health status and an ideal health situation where the entire population lives to an advanced age, free of disease and disability”.

contribute to stroke<sup>107</sup>, several other cancers<sup>108</sup>, other forms of liver disease, and diabetes, depression, hypertension, ischemic heart disease and arrhythmia<sup>109</sup>. The Institute of Alcohol Studies (IAS)<sup>110</sup> have identified the major medical and social problems associated with the three levels of alcohol consumption; (1) *acute intoxication* (Medical; acute alcohol poisoning, gastritis, cardiac arrhythmias, pancreatitis, and disturbed sleep, Social; inappropriate sexual behaviour, criminal behaviour, unsafe sex, unwanted pregnancies, and accidents), (2) *excessive consumption* (Medical; liver and brain damage, hypertension, cardio-myopathy, cardiovascular disease, and malignancies, Social; absenteeism from work, impaired social relationships, psychological problems, criminal behaviour, and sexual problems), and (3) *alcohol dependence* (Medical; dementia, alcoholic hallucinations, and withdrawal symptoms, Social; social disintegration, morbid jealousy, family and financial problems, and unemployment).

The WHO has also identified the European Union (EU) region as the region of the world with the greatest proportion of alcohol drinkers, with the highest levels of alcohol consumed<sup>111</sup>, and that after smoking and high blood pressure, alcohol is the third largest risk factor for ill-health within the EU community<sup>112</sup>. As part of their 2006 report for the EU Commission, *Alcohol in Europe, a public health perspective*, Anderson and Baumberg<sup>113</sup> undertook a social-cost review of alcohol in EU, and estimated that the total cost of alcohol in the EU was approximately €125bn (using 2003 figures). Of this, alcohol-related problems cost €66bn, potential production lost due to absenteeism, unemployment and premature mortality accounted cost €59bn. Individual factors looked at showed costs of traffic accident damage (€10bn), crime including damage, defensive and policing (€33bn), treatment, prevention and health (€22bn), mortality (€36), absenteeism (€9bn), and unemployment (€14bn)<sup>113</sup>.

More recently, in England during 2007/08, there were 863,300 alcohol related hospital admissions<sup>114</sup>, and in 2007 there were 6,541 deaths directly related to alcohol use (the majority being from alcoholic liver disease), showing a 19% increase from 2001 reports<sup>114</sup>. The financial impact of alcohol use on the NHS in England has been estimated at £2.7 billion yearly (based on 2006/07 cost prices)<sup>114</sup>. However, when all costs associated with alcohol misuse were calculated in 2004 the result was estimated at £20 billion. This latter figure not only included the costs directly associated with alcohol related disorders and diseases, but also social costs such as crime and anti-social behaviour, loss of productivity in the workplace, and problems for those who misuse alcohol and their families (including domestic violence).

For young people the problems linked to alcohol use are often very different in nature than those affecting older adults, being more centred on issues resulting from acute alcohol intoxication than disease and disability arising from chronic use and abuse<sup>115 116</sup>. Although far less common than acute problems<sup>117</sup>, long term problems associated with chronic alcohol consumption among young people has also risen, with chronic liver disease and cirrhosis in England among 25-34 year olds having increased from 16 for men and 7 for women in 1970 to 68 for men and 60 for women in 2000<sup>118</sup>. Alcohol dependence amongst underage drinkers is not common, but, nearly nine thousand children and young people accessed treatment for alcohol problems in 2008/9; an increase from just under five thousand three years earlier (2005/6)<sup>119</sup>.

Underage alcohol drinking and intoxication has been found to be associated with an increased likelihood of road traffic accidents (RTAs)<sup>120 121</sup>, sexual risk taking<sup>122</sup>, attention and conduct problems, and anxiety and depression (in girls)<sup>123</sup>, anti-social behaviour<sup>124</sup>, violence<sup>125</sup>, accidental or unintentional injury<sup>126</sup>, as well as the risk of future alcohol abuse and future

alcohol associated diseases and disorders that result from chronic misuse and abuse<sup>127</sup>. In the United States (US) in 2006 it was estimated that 5,000 young people under the age of 21 die each year as a result of drinking underage (RTAs, homicides, suicide, and others such as falls, burns and drowning)<sup>128</sup>. A 2007 survey carried out in 35 European countries showed that 4% of boys and 2% of girls aged 15 and 16 years old who were included in the study had attended an Accident and Emergency department or been admitted to hospital as a result of their alcohol consumption<sup>129</sup>. Newbury-Birch *et al*<sup>130</sup> carried out a systematic review of published reviews looking at the impact of alcohol consumption on young people and found that there was a dearth of methodologically sound literature on the subject. However, they<sup>130</sup> suggest that despite this and because there is consistency in the trends that are shown between alcohol and the adverse effects on children and young people, credible conclusions can still be made.

### **1.2.2 The benefits of alcohol use**

Alcohol has been used in societies around the world for centuries, without necessarily resulting in adverse effects or problems, and unlike other controlled legal substances such as tobacco, is a widely accepted socially acceptable behaviour in western societies, including Britain.

There have been benefits of alcohol consumption cited in the literature, with the commonality between different reported benefits being for *light*, *moderate* or *low* levels of consumption<sup>131 132</sup>. Peele *et al*<sup>132</sup> concluded that moderate alcohol consumption is a positive experience for the majority of individuals and social groups. Some of the benefits are highlighted in Thakker's review<sup>131</sup> which summarised that there may be a protective effect from cardio-

vascular disease, reduced tension, stress, fear, pain, and depression, as well as increased affective expression, and confidence. However, Thakker's review<sup>131</sup> also acknowledged that potential benefits can vary between individuals and they do not necessarily apply to all populations, or sub-populations. Thakker further notes the subjectivity of what constitutes a benefit stating that "*What one individual might perceive as a net benefit another might perceive as neutral or as a disadvantage*" (p 287S)<sup>131</sup>. Others disagree<sup>133 134</sup>, and claim that the evidence is insufficient to demonstrate that beneficial effects can occur, and that there are no safe levels of alcohol consumption. The Independent Scientific Committee on drugs state "*alcohol is toxic: it is not harmless below a certain level, and harmful above it*"<sup>133</sup>.

For young people, Engels and Knibbe<sup>135</sup> suggest that alcohol consumption can also be beneficial by providing them with the opportunity to express their individual social identity, and that among the young people in their study who had consumed alcohol they were more likely to have more, and closer, friendships. They also found that this provided someone the young people could discuss their personal issues with, they experienced less loneliness, spent more time socialising, and were more likely to have stable relationships. Also, like many adults, young people have reported using alcohol for social motives (e.g. celebrating with friends), enhancement motives (e.g. to cheer up), and coping motives (e.g. stress relief)<sup>136</sup>. As with beneficial effects of alcohol for adults, there is little consensus over whether any actual benefits exist, and Newbury-Birch *et al*<sup>130</sup> recommend that the adverse consequences of drinking alcohol during childhood and adolescence outweigh the few conceived benefits.

### **1.2.3 Recommended alcohol consumption**

There are differences between what are believed to be beneficial, as opposed to, harmful levels of alcohol consumption. Even levels recommended in different country's guidelines vary and that there is variation in what is considered to be a standard drink, or unit, between countries<sup>137</sup>. For example, in the Republic of Ireland, it is recommended that men drink a maximum of three units (24g) per day and women two units (16g) per day<sup>138</sup>, while in Australia, men and women are both recommended to drink no more than two standard drinks (20g) on any single day to reduce the risk of long-term harm from alcohol-related disease, while they also recommend that consuming no more than four standard drinks (40g) on a single occasion will reduce the risk of alcohol-related injury arising from that occasion<sup>139 140</sup>.

The recommendations in the UK are for men to consume no more than three to four units per day (24-32g), and for women between two and three units per day (16-24g)<sup>5 6 110 133 141</sup>. In the UK there are several websites available to assist people in calculating their alcohol consumption<sup>142 143</sup>. A further UK recommendation is that the daily guideline recommendations should not be consumed at this level everyday<sup>110 133</sup>, as not only is the volume of alcohol consumed important, but also the pattern of alcohol consumption<sup>106</sup>. It is recommended that having several alcohol-free days a week is important to maintain health<sup>133</sup>.

In 1987 Knupfer<sup>144</sup> found that the majority of light drinkers were not daily drinkers, and that most people who were daily drinkers were not light drinkers. Paradis and colleagues<sup>145</sup>, when investigating the impact of drinking frequency in individuals' drinking patterns, found that those who drank less often than once per week were less likely than those that drank on a weekly basis to consume

more than two drinks when they did drink, that usual daily quantities consumed by weekly drinkers were unrelated to their drinking frequency, and the risk and frequency of binge drinking increased with the frequency of drinking.

For children and young people it is not recommended<sup>146</sup> to drink alcohol at any level. But in 2009 it was recommended by the Chief Medical Officer that if children are going to drink alcohol it should not be until at least the age of 15 years old, and that even at this age it can be hazardous to health<sup>146</sup>. Newbury-Birch *et al*<sup>130</sup> suggests that because there is a lack of good evidence available about the impact of drinking on children and young people it is not possible to accurately assess whether current guidelines for adults are appropriate for children and young people who are going through physiological and emotional development. But they do also stress that *"an absence of evidence in this field does not mean that there is evidence of no impact of alcohol on such individuals"* (p 2)<sup>130</sup>.

#### **1.2.4 Problem drinking and alcohol dependence**

Any potential or perceived benefits that an individual can gain from consuming alcohol are likely to be realised only if the level and pattern of their consumption is within what is generally considered to be sensible drinking. As noted above<sup>5,6</sup>, the UK government has published recommendations for safe and sensible drinking whereby individuals drinking within these limits are less likely to cause themselves, or others, significant harm.

However, also noted above, when alcohol is consumed in excess it can cause a range of harms, including disease, disability and premature death as well as other social problems. The range of drinking behaviours surrounding

alcohol can range from total abstinence, to occasional use, to harmful use (also frequently referred to problematic use or abuse) to dependence<sup>147</sup>. Five levels of alcohol problems have been identified; not yet developed, hazardous, harmful, moderately dependant and severely dependant<sup>148 149</sup> (see **figure 1.2** below, also showing the Department of Health's (DoH) corresponding recommended intervention<sup>148</sup>). It is further noted by the DoH that individuals can move between the different categories, and that the boundaries between each of the levels are imprecise.

**Figure 1.2:**  
**Levels of alcohol consumption and recommended interventions:** (Adapted from Committee on Treatment of Alcohol Problems and Institute of Medicine (p30)<sup>149</sup> and Reducing Alcohol Harm: health services in England for alcohol misuse (p5)<sup>148</sup>)

	Alcohol consumption level	Recommended intervention
 <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Increasing severity of problems</p>	<p><b>Severely dependant</b> (likely to suffer from withdrawal fits)</p>	<p>→ <b>Intensive treatment</b> - detoxification in hospital and residential rehabilitation</p>
	<p><b>Moderately dependant</b> (high tolerance, some loss of control over drinking likely to suffer from withdrawal)</p>	<p>→ <b>Specialist treatment</b> - detoxification and counselling</p>
	<p><b>Harmful</b> (some evidence of alcohol related problems such as health or social problems)</p>	<p>→ <b>Medical advice</b> – extended period of medical advice</p>
	<p><b>Hazardous</b> (anyone drinking over the recommended guidance)</p>	<p>→ <b>Brief intervention</b> – brief advice from a healthcare professional</p>
	<p><b>Not yet developed</b> (those who have no level of alcohol misuse)</p>	<p><b>Public health campaigns and education</b></p>

As can be seen from **figure 1.2** above, problematic drinking can take various forms. There are various scoring tools available (e.g. the Severity of Alcohol Dependence Questionnaire (SADQ)<sup>150</sup>, the CAGE questionnaire (Cutting

down, Annoyance by criticism, Guilty feeling, and Eye-openers)<sup>151</sup>, the Paddington alcohol test<sup>152</sup>, and the Alcohol Use Disorders Identification Test (AUDIT)<sup>153</sup> to assist in categorising an individual's alcohol consumption, and identify those in need of help. The latter test, AUDIT<sup>153</sup>, developed and validated by the WHO is a 10-point questionnaire to determine harmful drinking and the questions cover actual alcohol consumption, alcohol dependence, and alcohol related problems. Depending on the resulting score, it can be indicative of a problem with alcohol consumption and the level of the problem. The AUDIT test does not only take account of the quantity and frequency of alcohol consumption, but also considers the affect of alcohol consumption on the individual.

Although AUDIT is highlighted by the National Institute for Health and Clinical Excellence (NICE) as being adequate for use with young people, it is suggested that other, more effective identification tools need to be established and validated for use in younger age groups as the tools currently available are less effective when used with younger age groups than with adults<sup>154</sup>.

Heavy drinking, or "*binge drinking*" has been acknowledged in British culture for centuries<sup>115 155</sup>. According to the IAS the term binge drinking was originally used in clinical settings to describe "*a periodic bout of continual drinking, perhaps over a period of days, by someone who was alcohol dependent, and ending only when the drinker was unable to continue*" (p 3)<sup>115</sup>, however they also acknowledge that binge drinking now refers to any single drinking session where high volumes of alcohol are consumed<sup>115 156</sup>. There is no single definition of binge drinking in use<sup>156-158</sup>, but generally in the UK it refers to single occasions where men consume at least 8 units and women at least 6 units<sup>5 6 115</sup>. However this definition does not take into consideration the time period the alcohol is consumed over, an entire day, or only a couple of hours, the weight and alcohol

tolerance of the individual, and the speed of consumption; all which can vary between individuals<sup>144 156</sup>.

Binge drinking is the most problematic drinking behaviour among young people in the UK<sup>115</sup>. Although it is more common that young people binge drink than older adults it is not a behaviour exclusive to the young, and it has been found that those who drink heavily or binge drink as teenagers and young adults are more likely to binge drink later on in life, and patterns of binge drinking continues to decline through adult life<sup>115 159</sup>. This frequently reported problem of young people binge drinking in the UK is suggested to have remained unchanged since 2001<sup>32</sup>. It is repeatedly mentioned in the news<sup>160</sup>, and many policy attempts have tried to address this problematic alcohol use behaviour (see section **1.2.6** and **1.2.7** below)<sup>83 161-163</sup>.

### ***1.2.5 Trends in alcohol use (adults and young people)***

Globally, alcohol consumption has increased in recent decades, with all or most of this increase occurring in developing countries<sup>106</sup>. However, current levels of alcohol consumption in the UK are a major threat to public health, although prevalence is declining. In 2009, the General Lifestyle Survey (GLS)<sup>39</sup> shows that there had been a fall in the drinking habits of UK adults from the 2006 GHS (General Household Survey)<sup>4</sup>. The 2009 figures show that 68% of men and 54% of women reported having had an alcoholic drink in the previous seven days<sup>39</sup>, compared with 72% of men and 57% of in the previous seven days in 2006. The 2009 GLS<sup>39</sup> also shows that there had been little change in reports between 1998 and 2003 (2003: 75% of men, and 60% of women), a fall between 2003 and 2005, to 72% of men and 57% of women, and then little change until 2007. The 2009 figures show that there's been a further small decline since 2007.

Thirty-seven percent of men and 29% of women reported exceeding recommended limits for daily alcohol consumption in 2009 (4 units for men, and 3 units for women)<sup>39</sup>. This was also down from 2007, where it was shown to be 41% for men and 34% for women<sup>5</sup>. This pattern of decline was similar for those classified as heavy or binge drinkers (defined as consuming at least 8 units for men and 6 units for women on at least one occasion during the previous week) which showed 23% of men in 2006 to be heavy drinkers and 20% in 2009, while 15% of women in 2006, and 13% in 2009 were classed as such<sup>5 39</sup>.

For young people (11-15 year olds) surveyed in England in 2008<sup>32</sup> just over half, 52%, had consumed at least one alcoholic drink in their lifetimes, and this increased with age such that 16% of 11 year olds and 81% of 15 year olds had tried at least one alcoholic drink in their lifetimes. From the pupils surveyed, 18% had consumed an alcoholic drink in the previous week and the majority of these young people (60%) had consumed more than four units on one or two days (equivalent to at least the upper limit recommended for adult men to consume on a single day<sup>164</sup>). Seventeen percent said they had been drunk in the previous four weeks, with older pupils more likely than younger pupils to have gotten drunk. Of the 15 year olds surveyed, 63% had been drunk at least once in the previous four weeks, and for 33% of these young people this was deliberate.

The WHO has acknowledged that evidence increasingly shows that drinking patterns and not only the volume of alcohol consumed are important for health outcomes<sup>106</sup>. In 2007, a School Health Education Unit survey found that 2% of boys and 1% of girls aged 14-15 years old reported that they had been drunk on at least three occasions in the previous week<sup>165</sup>.

### **1.2.6 Young people and alcohol uptake**

Currently in the UK, the age at which alcohol may be purchased or supplied<sup>166</sup>, possessed in a public place<sup>167</sup>, or consumed in licensed premises<sup>168</sup> is 18 years. For those aged under 18, in certain situations it is within the law to consume alcohol but there are strict criteria attached to consumption among under-eighteens. For example, with parental consent and at home accompanied by their parents, children in the UK can legally consume alcohol from the age of five years<sup>169</sup>. Another example is that 16 and 17 year olds are allowed to consume wine, beer, or cider in a licensed premises with a table meal; in England and Wales they must be accompanied by an adult over the age of 18<sup>170</sup>, but this is not a restriction in Scotland<sup>171</sup>. However, as mentioned earlier this is not recommended for health reasons<sup>146</sup>.

There are many reasons cited in literature as to what influences and encourages young people to begin, and continue to consume alcohol at young ages including perceiving it as a sought after adult behaviour, image portrayal and self-definition<sup>172</sup>, parental drinking habits (heavy parental drinking and parental abstinence have both tended to result in increased alcohol consumption among their children)<sup>173</sup>, peer and sibling drinking habits<sup>174</sup>, personality<sup>130</sup>, direct and indirect alcohol advertising, marketing, sponsorship, and promotion (e.g. at sport, music and cultural events, point-of-sale, radio, television, press, film and cinema, as well as branded merchandise)<sup>175-182</sup> (alcohol advertising will be discussed in more detail in the following chapter, **Chapter 2**). And, as mentioned above, social, enhancement, and coping motives for alcohol use have been documented as being motives for youth alcohol use<sup>136</sup>.

### 1.2.7 Alcohol public health policy

In 2010 the WHO produced a *Global strategy to reduce harmful use of alcohol*<sup>183</sup>, with the overall aim of reducing the burden of disease, disability and death that occurs as a result of alcohol consumption. Within this document<sup>183</sup> 10 key areas for action are identified, (see **table 1.2** below), with the intention of WHO member states implementing them in the most appropriate way for their individual countries, whilst also working collaboratively with other member states. The strategy is due to be at the Sixty-sixth World Health Assembly in 2013.

1.	Leadership, awareness and commitment
2.	Health services' response
3.	Community action
4.	Drink-driving policies and countermeasures
5.	Availability of alcohol
6.	<b>Marketing of alcoholic beverages</b>
7.	Pricing policies
8.	Reducing the negative consequences of drinking and alcohol intoxication
9.	Reducing the public health impact of illicit alcohol and informally produced alcohol
10.	Monitoring and surveillance

Although nowhere in this document is the incidental generic or branded appearance of alcohol in film or television programming addressed, the document does make reference to alcohol product placement and promotion on television as well as other media more generally, and states; *“Alcohol is marketed through increasingly sophisticated advertising and promotion techniques, including linking alcohol brands to sports and cultural activities, sponsorships and product placements, and new marketing techniques such as e-mails, SMS and podcasting, social media and other communication techniques.*

*The transmission of alcohol marketing messages across national borders and jurisdictions on channels such as satellite television and the Internet, and sponsorship of sports and cultural events is emerging as a serious concern in some countries” (p 15)<sup>183</sup>.*

However, in an earlier WHO report<sup>184</sup> it is acknowledged that alcohol is promoted through film content. The overall aim of this earlier report was to highlight effective evidenced based strategies to reduce the harm associated with alcohol consumption, which included marketing and promotion<sup>184</sup>. This report stated that the reliance on voluntary systems governing marketing and advertising implemented and regulated by industries themselves are ineffective and do not prevent marketing that impacts on young people. They also argue that if they are not legislated, monitored and reviewed by government agencies, then it may result in loss of policy control over the marketing of a product that seriously affects public health.

In the UK, in 1998 the Government identified and announced a need for a strategy on alcohol in the UK, however this was not published until 2004<sup>163 185</sup>. An earlier comprehensive government report on alcohol in the UK, *Alcohol Policies*, was carried out in 1979 towards the end of the then Labour government, but never published in the UK. It was only published in Sweden in 1982 where it was out of the jurisdiction of the Official Secrets Act<sup>186</sup>. Room<sup>185</sup> reports that this earlier report highlighted that the government’s approach to alcohol was fragmented and called for better coordination, highlighting the benefit of increasing alcohol taxes and maintaining prices, and recommended improved prevention of underage drinking, and the maintenance of strict licensing.

In 2003 the Government published *Alcohol misuse: How much does it cost?*<sup>187</sup>, this was a detailed assessment of the costs of and harm caused by

alcohol and had the main aim of informing the Government's *National Alcohol Harm Reduction Strategy*. This report did not include any recommendations for future public health policy, but highlighted many areas that alcohol impacts on, such as costs to health, the health service and society.

The government highlighted alcohol as a principal public health concern in the 2004 White Paper *Choosing Health: Making Healthier Choices Easier*<sup>83</sup> and specifically identified a need for the UK government to play a role in reducing demand for alcohol, with particular emphasis on protecting children and young people. The government followed this by publishing the *Alcohol Harm Reduction Strategy for England*<sup>163</sup> in the same year, the purpose of which was to identify how the government would prevent any increase in alcohol-related harms in England and ensure that tackling the harms of alcohol would become a key feature of current public health policy.

This strategy has been criticised by many<sup>185 188 189</sup>. For example, Room<sup>185</sup> suggested that it has been delivered too little too late, and suggested that the majority of the measures highlighted as important in the strategy have previously been shown to be ineffective, and claimed that the earlier unpublished 1979 report was far more comprehensive. Drummond<sup>188</sup> also argued that many methods previously demonstrated to be more effective have been overlooked in the strategy, such as restricting availability through licensing, and consumption through price; and further argues that the strategy lacked any clear and measurable objectives. Drummond<sup>188</sup> also made criticism of the voluntary governance of the alcohol industry, while Luty<sup>189</sup> went further than this and alluded the alcohol industry influenced the strategy.

Regardless of the criticism received, within the *Alcohol Harm Reduction Strategy for England*, it was acknowledged that a review of television advertising

practices was necessary to ensure that adverts were not targeted at young people, and not glamorising irresponsible behaviours. As noted earlier, alcohol advertising has been shown to influence young people's drinking habits<sup>175-177</sup>. This resulted in a new Ofcom (Office of communication – an independent organisation which regulates the UK's broadcasting, telecommunications and wireless communications sectors) television advertising code in 2007<sup>190</sup>. However, use or placement within either television programming or films broadcast was not identified, and this code only covered broadcasting of direct advertisements. This strategy was further followed up in 2007 by *Safe. Sensible. Social. the next steps in the national alcohol strategy*<sup>191</sup>, which identified measurable outcomes, and continued to keep the reduction of harm associated with alcohol a key public health priority in the UK, again with the particular emphasis on protecting young people.

In June the following year, 2008, *The Youth Alcohol Action Plan*<sup>162</sup> was published and set out what the Government proposed to do to address the problems associated with public youth drinking. This included working in partnership with industry, and providing clear information to parents, carers, children, and young people about the risks of early drinking. Again, the plan relied on voluntary industry involvement, but it suggested that the government would work with industry to strengthen the existing standards, with a view to making these standards mandatory.

In 2009, the Chief Medical Officer recommended in *Guidance on the consumption of alcohol by children and young people*<sup>146</sup>, that by far the healthiest and best option is for an alcohol-free childhood, however if children are going to drink alcohol it should not be until at least the age of 15 years old, and that even at this age it can be hazardous to health. The same report also recommended that those aged between 15 and 18 should only consume alcohol

with the guidance of a parent or carer or in a supervised environment<sup>146</sup>. The purpose of this information was to empower parents and carers to be able to guide their children's alcohol consumption and ensure that any alcohol related harms are minimised, and not to support underage drinking.

In January 2010 the House of Commons Health Select Committee published a report on alcohol<sup>192</sup>. This report made several recommendations to the Government, including the introduction of minimum pricing, and backing this up with policies that change the culture and attitudes toward drinking, such as education and information campaigns, and including units and recommended intake guidelines on labelling of alcohol containers, stricter controls of alcohol advertising and marketing which included new media, stricter enforcement of the Licensing Act 2003, and Policing and Crime Act 2009, amending the Licensing Act to include a public health objective, improving the provision of early detecting and early intervention for problematic drinking behaviours, and becoming less reliant on the alcohol industry's self-regulation and policy input.

Three months later, in March 2010, the government published its response to this report: *The Government Response to the Health Select Committee Report on Alcohol*<sup>193</sup>. Within this response the government acknowledged that the problems associated with alcohol use in the UK are currently at unacceptable levels, referred to the 2007 afore mentioned report *Safe. Sensible. Social. the next steps in the national alcohol strategy*<sup>191</sup>, and asserted the need for individuals personal choice and responsibility, emphasising the importance of education and information campaigns to enable individuals to make informed choices.

The government responded to the recommendation to become less reliant on self-regulation by stating that; "*The Government is strongly supportive of the*

*current regulatory system and notes that appropriate levels of independence are already built into the system” (p 20)<sup>193</sup>. The government also states that existing advertising regulatory systems ensure socially responsible marketing, advertising, and promotion, and that there was insufficient evidence to support any need for tighter restrictions. They did note however that if new evidence were to emerge showing certain techniques to be a risk of harm then this would be considered and appropriate action taken. Alcohol advertising will be considered further in the following chapter, **Chapter 2**.*

## **Chapter 2: Tobacco and alcohol in media**

## **2.1 Tobacco in film and on television**

### ***2.1.1 Effects of viewing tobacco content in films***

Adolescents who admire Hollywood film characters who smoke are more likely to view smoking favourably, and more likely to smoke themselves<sup>72</sup>. Cross-sectional studies<sup>50 51</sup> have shown that adolescents whose favourite film stars smoke on-screen are more likely to have tried smoking, and those who believe that film smoking represents reality overestimate smoking prevalence among peers and adults<sup>194</sup>. Data from Germany demonstrate that high levels of exposure to film smoking in popular internationally distributed US films is associated with an approximate twofold increase in the likelihood of being a smoker<sup>74</sup>, and in the US, Sargent *et al*<sup>67</sup> have reported a strong, direct and exposure-related association between viewing film smoking and adolescent smoking, in which the odds of trying a cigarette was increased by a ratio of about 2.5 in those with the highest level of exposure. In Mexico exposure to film smoking was found to be associated with both current and ever smoking among adolescents<sup>195</sup>. A UK study<sup>196</sup> demonstrated a direct relation between film smoking exposure and smoking experimentation among 15 year olds, and this relationship was dose-response, with higher levels of film smoking exposure being associated with an increase in risk of smoking initiation. A European study<sup>197</sup>, including more than 16,500 adolescents from six European countries (Germany, Iceland, Italy, Netherlands, Poland, and Scotland), not only demonstrated exposure-related increases in the odds of smoking among adolescents exposed to film smoking, but for the first time showed that the association applies across different cultural contexts and levels of other tobacco control measures across EU countries. Only one published study of this association, a cross-sectional study of 19 year-olds from Scotland in 2004, has found no evidence of association<sup>198</sup>. However, a more recent study<sup>199</sup> in the

same region has since, and this time using a younger age group, found a strong association between film smoking and youth smoking. Additionally this study<sup>199</sup> found that exposure-related increases in the odds of smoking were enhanced by repeated viewings. Adolescents exposed to high levels of film smoking also show increased positive expectancies about smoking and affiliation with peers who smoked, both of which are risk factors for smoking onset<sup>200</sup>.

Prospective studies reveal findings consistent with a causal association, with high levels of film smoking exposure being strongly associated with an increased risk of smoking uptake. A study of 10-14 year old never smokers in the US found that those most exposed to film smoking were more than four times more likely to take up smoking than those with low exposure<sup>73</sup>. Similar findings have been reported from Germany<sup>75</sup> and other US regions<sup>71 201</sup>.

A recent meta-analysis<sup>196</sup> showed a combined effect size of young people exposed to greater amounts of film smoking being nearly twice as likely to smoke (onset or current/established) than those least exposed. Additionally in the US, research has shown that showing anti-smoking advertisements before films that contain tobacco use can nullify, to an extent, the effects of the smoking depicted in them, especially for non-smokers<sup>202-204</sup>. Collectively therefore, the evidence provides strong evidence that this association is causal.

### ***2.1.2 Tobacco occurrence in films***

Tobacco companies are known to have used films and celebrities to promote their products since at least 1927<sup>205</sup>, and have continued to do so since<sup>206</sup>. Internal tobacco industry documents from the 1920's and 30's<sup>205</sup> identified endorsement contracts between the tobacco industry and film stars and studios,

as well as revealing the cross-promotional value of these campaigns, and there is evidence<sup>206</sup> that paid-for tobacco product placements persisted at least as far as the 1990's. However these studies confirm only paid-for product placement; the evidence of influence on adolescent smoking relates to smoking imagery in general, irrespective of whether branded.

Tobacco imagery has been shown to be common in popularly viewed feature films<sup>74 75 207-217</sup>, including children's animated films<sup>218 219</sup>. Studies of US films have reported that between 78 and 98% include some form of tobacco imagery or other tobacco content<sup>207-209 214</sup>, with studies from other countries, including Indian Bollywood films<sup>217</sup>, reporting figures well over 70%<sup>74 75 216 217</sup>. The only study reporting substantially lower smoking levels came from Nigeria<sup>220</sup> where 17% of 497 English and Yoruba language films were found to portray tobacco use. No study has documented the occurrence of tobacco in popularly viewed films in the UK.

The occurrence of smoking in US films declined slightly between 1960 and 1990<sup>207</sup> but rebounded to 1960s levels by 1996<sup>211</sup> and continued to increase until 2002<sup>212 213 215</sup> when smoking in the most popular films was reported to be at a similar level to that shown in the 1950's<sup>215</sup>, and to over-represent smoking in relation to contemporary prevalence. Although this conclusion was later challenged<sup>221</sup>, a further study of US films from 1996 until 2004 found that 39% represented a smoking prevalence among adult characters that was higher than that of the actual adult population in the year of release<sup>222</sup>. The trend in smoking occurrences may differ between films according to US age-classification; Worth *et al*<sup>222</sup> found that there was a significant downward trend in the portrayal of smoking among adult characters in G/PG and R rated films, but not in those rated PG-13.

The context of smoking in films has also changed. A shift from individual to more social smoking has been noted between 1960 and 1990<sup>207</sup>, whilst other reports have shown that smokers tend to be depicted as successful white males<sup>211 209</sup>, more romantically and sexually active, and more intelligent<sup>223</sup>; however, smoking was similarly common in good and bad characters<sup>218</sup>. There is also evidence that female smoking is increasing in film<sup>211</sup>, and in one study of Hollywood portrayal of women in films, smoking was more likely among younger actresses, to be used by women to control emotions, manifest power and sex appeal, enhance their body image or self-image, control weight, or to give themselves a sense of comfort and companionship<sup>224</sup>. Men were more likely to be depicted using tobacco products to reinforce masculine identity, portray a character with power, prestige, or significant authority, show male bonding, or to signify their status as a "protector"<sup>224</sup>. Negative health consequences of smoking, such as ill health, were typically ignored<sup>223</sup>; negative reactions to, and negative consequences of tobacco use were rare<sup>208</sup>; and there were generally more events deemed by researchers to be pro-tobacco than anti-tobacco<sup>209</sup>.

The occurrence of tobacco imagery is generally similar in films of different genre<sup>225</sup>, with the exception of animated feature films in which smoking is less common though still present in over 40%<sup>218 219</sup>, and tends to favour cigars over cigarettes<sup>218</sup>. Smoking is also generally less common in youth rated films in most<sup>210 208 214 221</sup>, but not all<sup>226</sup> studies; however of children's exposure to smoking in film, 80% has been estimated to arise from films rated as suitable for children (G, PG, or PG-13)<sup>201</sup>.

Tobacco brand appearances (TBA) reportedly occurred in 28% of popular US films 1988-1997<sup>226</sup>, with the most common brands appearing being *Marlboro* (40%), *Winston* (17%), *Lucky Strike* (12%), and *Camel* (11%). When comparing TBA before (1988-90) and after (1991-97) the voluntary ban on paid-for product

placement in the US (the Master Settlement Agreement (MSA)) one study found no overall change in the number of TBA, but did find that actor endorsement (handing or using a branded tobacco product on-screen) increased after the ban<sup>226</sup>. However, a subsequent study<sup>227</sup> found that TBA dropped from 20.8% pre-MSA to 10.5% post-MSA but this decrease was inconsistent across age ratings, with the decline in lower rated films not being significant. The study also found that having been stable before the ban, the number of TBA decreased annually after it. This study took into account that films released just after the ban would have already have been in production before the ban.

### ***2.1.3 Effects of viewing tobacco content on television***

There have been no studies investigating an association between viewing tobacco content on television, as opposed to generic television viewing, and smoking behaviour. However several researchers who have investigated the occurrence of tobacco on television<sup>210 228-230</sup> have suggested that tobacco content may condition behaviour through repeated viewings, and normalise smoking among viewers, and that these influences might be stronger among young audiences, where viewers are more impressionable<sup>231</sup>.

It has been found that young people who watch greater amounts of television are more likely to initiate smoking<sup>77</sup> and more likely to initiate smoking at a younger age<sup>79</sup>, that existing young smokers are more likely to smoke more<sup>232</sup>, and that this influence on smoking is the case for adult as well as younger tobacco users<sup>233</sup>. In one study, young people exposed to five or more hours of television daily were six times more likely to initiate smoking than those who watched less than two hours<sup>77</sup>, and in another, for each additional hour of daily television viewing the average age of smoking initiation decreased by 60

days<sup>79</sup>. Established young smokers who watched five or more hours of television a day on average smoked between 60 and 147 cigarettes more each week than those who watched one hour or less<sup>232</sup>. In a mixed youth and adult population (15 to 54 years) in India, daily television viewing and radio listening were associated with a higher likelihood of tobacco chewing (a common form of tobacco use in India)<sup>233</sup>.

Although there is no evidence of the effects of tobacco content on television and smoking behaviour, given that the evidence of a causal effect of exposure to film smoking is strong, and since an estimated 27 million British homes have a television<sup>234</sup>, and young people aged between 6 and 17 in Britain report that they watch television for an average of 2.5 hours each day<sup>235</sup>, television is a potentially much more potent source of exposure to tobacco imagery among young people than films alone.

#### **2.1.4 Tobacco occurrence on television**

Investigations of televised tobacco content have been less frequent than film tobacco content, and many of the studies, such as one US study from 1979<sup>231</sup>, and other studies from the 1980's<sup>236 237</sup>, are outdated making them unrepresentative of current television broadcasting. Additionally, several existing studies have focused on specific genres or programmes, such as daytime soap operas<sup>229</sup>, Japanese drama series<sup>238</sup>, a specific German television crime series<sup>239</sup>, and the US reality television series *The Osbournes*<sup>240</sup>. Other studies have investigated very specific tobacco content, such as tobacco advertising<sup>241</sup> and tobacco promotion<sup>242</sup> in televised sports.

In the US, studies from the 1970's, 80's, and 90's have reported that in general television broadcasting<sup>231</sup> and in programming<sup>237 243</sup>, tobacco use occurred on average once an hour<sup>231 237 243</sup>. A UK study of the ten top programmes most frequently watched by young people<sup>244</sup> found smoking-related scenes occurred, on average, three times every hour. Differences between genres have also been found, with dramas showing more tobacco than comedies<sup>243</sup>. Tobacco occurred on average four times an hour in Japanese drama series<sup>238</sup>, five times an hour in one German crime series<sup>239</sup>, and in televised sporting events, tobacco advertising occurred about one and a half times each hour<sup>241</sup>. In one New Zealand study<sup>245</sup>, the US animated comedy *The Simpsons* had the highest number of smoking characters, with an average of five smoking characters each episode.

In general, tobacco use on television has declined between 1950 and 1982<sup>236</sup>, although a study in 2008 of a German crime series found that levels fluctuated with an initial decrease, followed by an increase<sup>239</sup>. A comparison of tobacco cues, defined as the presence on-screen of tobacco, in US daytime soap operas (1986, 1991, and 2001)<sup>230</sup> found cues were most frequent in 1991, compared with the other two years, with 1986 and 2001 having similar levels.

Findings on the occurrence of tobacco use and tobacco content have varied between studies, probably due at least in part to differences in methods and selection criteria. In both the US<sup>243</sup>, and New Zealand<sup>245</sup> 25% of television programmes contained at least one tobacco occurrence, while in Germany<sup>246</sup> 45% of programmes contained smoking. Tobacco occurrences differed between genre; smoking was most frequently seen in feature films broadcast on television (77%) than in any other genre<sup>246</sup>, in 19% of comedy and drama programmes<sup>247</sup>, and in one specific German crime series smoking was much more frequent, with 97% of episodes containing smoking<sup>239</sup>.

In analysis of television smokers in the US, Japan and New Zealand in the 1980's, 90's and 2000's, the portrayal of smokers tends to be more often male than female<sup>237 238 243 245 248</sup>, more often white than non-white<sup>243</sup>, and adults but not teenagers were depicted smoking<sup>247</sup>. Smokers were often lead characters<sup>237</sup>, or they had relatively prominent roles within the storyline<sup>244</sup>, but only a minority of smoking occurrences (13%) were directly relevant to the storyline<sup>238</sup>, and about half (45%) of smoking occurred in front of at least one non-smoker<sup>248</sup>. Many different categories of tobacco content were coded in the different studies, but one study identified actual smoking as more common than other tobacco content (e.g. handling, purchasing)<sup>238</sup>, while another<sup>245</sup> found roll-your-own cigarettes more frequently seen than other tobacco content, followed by cigars and pipes. Another study<sup>248</sup> identified ashtrays (46%), followed by cigarettes (30%) as the most commonly depicted paraphernalia. Smoking and other tobacco scenes were more often positive than negative<sup>243</sup>, or more often neutral or positive than negative<sup>245</sup>, with negative scenes only occurring rarely<sup>237 238</sup>. Others reported<sup>244</sup> that most smoking scenes were neutral, rather than either positive or negative, and one study<sup>240</sup> found that tobacco use messages appeared to endorse rather than reject its use. However, in one study nearly a quarter of tobacco use was accompanied by a negative statement about smoking, 13% with a positive statement, but only about one percent showed the negative consequences of tobacco use<sup>247</sup>.

Tobacco advertising in televised sporting broadcasts has been found to be common<sup>241 242</sup>, most frequently in professional sporting events, and mostly on stadium signs, with the majority of the brief product sponsorship and other on-site promotions seen in motor racing. In a comparison of tobacco promotion before and after the Master Settlement Agreement (MSA)<sup>242</sup>, a decrease in the number of stadium signs depicting tobacco was found; however there were

several instances where tobacco brand appearances were shown in advertisements for other unrelated products.

## **2.2 Alcohol in film and on television**

### ***2.2.1 Effects of viewing alcohol content in films***

Two systematic reviews of prospective cohort studies found an association between exposure to alcohol advertising or promotional activity in a variety of media and both initiation and alcohol consumption among young people<sup>177 249</sup>. The first<sup>177</sup> reported on cohort studies that followed up more than 13,000 young people, including studies that investigated televised alcohol advertising, exposure to television alcohol content, and film alcohol content, concluded there was very little difference in drinking frequency at follow-up in baseline alcohol drinkers. However, for baseline non-drinkers, increased exposure to alcohol advertising and promotion led to an increased risk of drinking at follow-up. The second review<sup>249</sup> included more than 38,000 young people, included studies that looked at various types of advertising and promotion, such as ownership of branded merchandise, and exposure to film alcohol content, and concluded that alcohol advertising and promotion increases the likelihood that young people will start to use alcohol, and to drink more if they already consume alcohol, if exposed to alcohol advertising and promotion.

Two further cohort studies have reported similar findings<sup>175 250</sup>. An assessment of drinking behaviour and drinking intentions among US adolescents exposed to alcohol marketing strategies found exposure to alcohol marketing strategies were strongly predictive of both alcohol drinking and intention to drink alcohol<sup>175</sup>, with those exposed to the greatest amount of alcohol marketing being

50% more likely to drink alcohol than those exposed to the least amounts<sup>175</sup>. A longitudinal examination<sup>250</sup> of the influence of alcohol advertising and promotions, such as televised alcohol advertisements, on the initiation of alcohol use among baseline never-drinking adolescents, found that 29% reported alcohol use at follow-up, and those who reported high baseline receptivity to alcohol marketing were 77% more likely to initiate drinking by follow-up than those least receptive. In another study<sup>251</sup>, higher exposure to film alcohol use increased the risk of alcohol use, and film alcohol use exposure was an independent risk factor for the onset of alcohol use<sup>251</sup>. In Germany<sup>179</sup> a direct association was found between film alcohol use exposure and both drinking with parental knowledge and binge drinking, and alcohol use increased with increased film alcohol use exposure. It has also been reported that the psychological factors mediating the relationship between film alcohol use exposure and alcohol use among young people were expectancies about alcohol use, willingness to consume alcohol, and friends' alcohol consumption<sup>178</sup>.

In an experimental study<sup>182</sup> assessing whether alcohol imagery in films and advertising promoted actual drinking behaviour in young people, those exposed to greater amounts of alcohol imagery in films or advertisements consumed more alcohol than the other participants.

### **2.2.2 Alcohol occurrence in films**

Previously, the alcohol industry has paid for their brands to be included in films<sup>252</sup>, and several alcohol companies have been identified as having placed their products in popular films e.g. *Coors (Scary Movie 3)*, *Heineken (Matrix Reloaded)*, and *Kahlua (Catwoman)*<sup>252</sup>; all of which are age classified suitable for young audiences in the UK<sup>253</sup>.

The occurrence of alcohol in films has been found to be common in the US<sup>209 251 254 255</sup>, even in G-rated animation films<sup>218 219</sup>. Most studies<sup>209 251 179 254 255</sup> have shown that alcohol features in between 83<sup>255</sup> and 96%<sup>209</sup> of popular films, with lower levels being found in G-rated animation films where about half<sup>218 219</sup> contained alcohol use. Only one Nigerian study<sup>220</sup> of English and Yoruba language films found lower levels of films containing alcohol (41%). Between 1977 and 1988<sup>210</sup> on-screen alcohol consumption was variable, however in G-rated animation films (1937-2000) alcohol use declined<sup>219</sup>.

Alcohol use was common among lead characters<sup>209</sup>, associated with wealth, luxury, sexual activity, and crime or violence<sup>254</sup>. Alcohol drinkers were portrayed as more attractive, more romantically and sexually active, more aggressive, and being of higher socioeconomic status than non-drinkers<sup>256</sup>, while both "good" and "bad" characters used alcohol as frequently<sup>218</sup>, and few films contained any anti-use messages<sup>254</sup>. One study<sup>257</sup> looking at alcohol messages portrayed by central teenage characters found almost 40% consumed alcohol on-screen at least once, 14% were shown drinking alcohol more often than once, 55% were depicted drunk, and 9% were shown drink-driving.

More than a third of films showing a central teenage character consuming alcohol were rated in the US as suitable for young audiences<sup>257</sup>. An investigation of popular films 1977-1988 found that in the latter years of the study alcohol use in youth rated films was more common than in adult rated films, however this finding was not significant<sup>210</sup>. Alcohol use was common even in US youth rated film categories, with the most commonly depicted brands in all age classification categories being *Miller* and *Budweiser*<sup>255</sup>.

### **2.2.3 Effects of viewing alcohol content on television**

Few studies have specifically attempted to establish an effect of viewing alcohol content on television with subsequent behaviour, however studies from the 1970's and 1980's have suggested links between exposure to drinking on television and drinking behaviour. For example Johnson (in US Congress p149<sup>258</sup>) reported that television broadcasting encouraged patterns of alcohol use, while others<sup>259</sup> suggested that alcohol imagery shown on television normalises the drinking behaviours shown.

The two systematic reviews<sup>177 249</sup>, and further cohort studies described above<sup>175 250</sup>, have shown an association between exposure to alcohol advertising or promotional activity in a variety of media and initiation, and the amount of youth alcohol consumption<sup>175 177 249 250</sup>. Additionally, increased viewing of programmes containing alcohol advertisements is associated with an increased future risk of beer and wine/liquor consumption among young people<sup>260</sup>, alcohol advertisement awareness has been found to be related to more favourable beliefs about drinking, greater knowledge of beer brands and slogans and, increased intention to drink as an adult<sup>261</sup>, and adolescents exposed to alcohol commercials perceived more positive consequences of alcohol consumption, but those exposed to alcohol portrayal in soap operas had less positive attitudes to alcohol, and had lower drinking intentions<sup>262</sup>. An investigation of the nature and impact of alcohol messages on young people showed that young people who felt more connected with the characters were more receptive to the messages displayed on-screen, and that connectedness was related to greater receptiveness of latent positive messages about alcohol<sup>263</sup>.

Experimentally<sup>264</sup>, children who were exposed to depictions of alcohol drinking on-screen were significantly more likely to choose alcoholic beverages

for adults, but not children. The children were exposed to one of three conditions (television with and without drinking depictions, and no television) then asked to choose to serve either whiskey or water to pictured adults and children.

#### **2.2.4 Alcohol occurrence on television**

The trend in drinking portrayals increased in entertainment programmes from 1950 to 1980<sup>236</sup>, while alcohol depictions significantly increased in US daytime soap operas between 1986 and 1991<sup>229</sup> and again between 1986 and 2001<sup>230</sup>. A 2002 comparison of alcohol use among characters in prime-time television with use among the US population found alcohol use to be less prevalent on television than in the US population<sup>265</sup>.

Nevertheless, alcohol is frequently portrayed on US television<sup>231 247 266 267</sup>, occurring about twice an hour of broadcasting in the 1970's<sup>231</sup>, and over 4 times per hour in the 1980's<sup>266</sup>, the latter study also noted that non-alcohol beverages were more common than alcoholic ones. In 2000 alcohol was evident in 77% of popular prime-time episodes, and was actually consumed in 71%<sup>247</sup>, while in 2009 alcohol was commonly depicted in prime-time dramas and comedies, appearing in at least one episode of each of the 18 different series<sup>267</sup>. Alcohol references were frequent in *The O.C.*<sup>263</sup>, a series popular among young people, with every episode containing alcohol, and each 42 minute episode contained on average four minutes of visual depictions and four verbal references to alcohol. Alcohol advertising has also been shown to be common in televised sporting events in the US<sup>241</sup> with over one and a half advertisements being broadcast every hour of sports programming.

A 1992 comparison of television programme alcohol content in three countries (US, Canada, and UK) found that British television fiction depicted three times more alcohol consumption than US or Canadian television<sup>268</sup>. Other studies<sup>244 269 270</sup> have also found alcohol to be commonly shown on British television; in 1988 a reference to alcohol occurred on average every 6 minutes<sup>269</sup>, while in 1997 popular British soap operas made reference to alcohol every 3.2 minutes<sup>270</sup>, and at least once in 86% of soaps<sup>270</sup>. The most recent UK study (2004)<sup>244</sup> found an alcohol-related scene occurred about 12 times every hour in the top ten programmes most frequently watched by British young people.

Other countries have also found television alcohol occurrences to be common<sup>262 271</sup>. Alcohol was present in 98% of all episodes of a Dutch soap opera, with an average of 4.4 drinking scenes shown in each episode<sup>262</sup>, and in New Zealand alcohol occurred in 63% of programmes and 39% contained actual alcohol use with an alcohol scene occurred on average every nine minutes of broadcasting<sup>271</sup>. These researchers<sup>271</sup> additionally found that the programme containing the greatest number of alcohol scenes was the British soap opera *Coronation Street*. Alcohol was commonly found in several genres<sup>241 242 266 270 272</sup> but was particularly common in soap operas<sup>262</sup>, principally British soap operas<sup>270-272</sup>, in films<sup>266</sup>, and in sports programmes<sup>241 242 266</sup>. The British soap operas that have been noted as having particularly high alcohol content have been *Emmerdale Farm*<sup>270</sup>, *Eastenders*<sup>272</sup>, and *Coronation Street*<sup>271</sup>.

Alcohol drinkers in prime-time and popular television programmes were more often men, than women<sup>271</sup>, had relatively prominent roles<sup>244</sup>, while consumption was associated with humour<sup>247</sup>, and frequently unrelated to the storyline<sup>229</sup>, but mostly shown in appropriate settings<sup>229</sup>, with about one-third of the drinking scenes in one study set in bars, nightclubs, or restaurants<sup>247</sup>. Both unproblematic and alcohol misuse behaviours have been reportedly shown, with

alcohol misuse occurring less often<sup>262</sup>, and underage drinking rarely depicted<sup>247</sup>, though in one study underage drinking was found in 5% of scenes<sup>271</sup>. There were variations in the way alcohol was portrayed, with most researchers<sup>244 247 269</sup> reporting few negative consequences of alcohol consumption, and one study that messages appeared to endorse alcohol use<sup>240</sup>. Another<sup>267</sup> reported negative consequences to be more common than positive ones, and when alcohol was central to the plot, it tended to be associated with negative elements, such as crime or addiction<sup>267</sup>.

### **2.3 Limitations of existing research**

The major limitations in the existing research that has investigated the effects on the audiences of viewing tobacco and alcohol content in films and on television are primarily with the study designs used. Employing certain study designs, such as randomised control trials, although would be easier to establish causality would be unfeasible, and most likely unethical, thus limiting the types of study designs available for use. Study designs available are limited to the determination of associations between viewing film smoking and film alcohol use and effects on the viewing audience, and cannot individually determine cause. Regardless of the problematic nature of determining whether such associations can be reasonably described as causal<sup>1</sup>, at least for film smoking the relationship can be described as such as the research has shown; there is a strong, direct and independent association between exposure to smoking in films and the risk of being or becoming a smoker, this association is exposure-related, that is, the more smoking seen by adolescents the more likely they are to be or become smokers themselves. The association is strong, in that those exposed to the greatest number of smoking images in films are between 2 and 4.3 times more

likely to experiment with or initiate smoking than those exposed to the least amounts of smoking in films (e.g.<sup>2 3</sup>). This finding is consistent between many different studies in different countries (e.g.<sup>3-5</sup>), with only one study failing to demonstrate an effect<sup>6</sup>. The exposure to smoking in film predates uptake of smoking (e.g.<sup>7 8</sup>), so is not an effect of smoking, and showing anti-smoking adverts in advance of films depicting tobacco imagery can have an “immunising” effect on the non-smoking young people that view them<sup>9-11</sup>. Although this has been established for films smoking, in order to determine for certain if this is the case for film alcohol use and both smoking and alcohol use in television further research would be necessary. This evidence has been regarded by the National Cancer Institute<sup>12</sup>, World Health Organisation<sup>13</sup>, and the British Medical Association<sup>14</sup> amongst other national and international health groups to be sufficient grounds to conclude that exposure to smoking content in films is a cause of smoking uptake among adolescents.

Another potential limitation is the possibility of confounding, even though the majority of the existing research has controlled for a wide variety of potential confounders including social, family and behavioural factors (e.g. parental socio-economic status, parental smoking status, friend smoking, alcohol use<sup>4</sup>). Even though known potential confounders have been controlled for in existing research, there exists the possibility that an unknown confounding factor exists that has not been considered.

Also, as with any research, there is the potential for the existing published research to be the subject of publication bias, where only results with significant findings being either submitted or accepted for publication. In the review of the literature here, one published study was found, by Hunt *et al*<sup>6</sup>, that reported finding no association between viewing seeing smoking in films and tobacco use in young adults in the west of Scotland. This study was included in

the meta-analysis undertaken by Waylen *et al*<sup>4</sup>, which showed that those exposed to the greatest amounts of film smoking were approximately twice as likely to smoke than those exposed to the least amounts of film smoking.

## **2.4 How media can influence behaviour**

Early research on the effects of media content on young people has predominantly focused on violence and aggression<sup>273-275</sup>. A systematic review<sup>273</sup> of literature 1956-1976, including studies of viewer violence and aggression, found a relation between watching violence on television and subsequent aggression displayed by viewers. Friedrich-Cofer and Heuston<sup>274</sup> concluded there was a causal relationship between viewing television violence and subsequent aggression, and Dennis's<sup>275</sup> review of 1930's and 40's literature showed there was concern over the content of certain radio programmes and the perceived effects on children. He also noted that the majority of early research was centred on changes in emotion rather than behaviour, and that it was not until the arrival of, and widespread ownership of, television and the development of social learning theory in the 1960's that any substantial research into the effects of media content on behaviour was carried out.

In simple terms, social learning is the process of learning through the observation of others' behaviour<sup>276</sup>. Social learning theory (SLT) has predominantly been developed by the US psychologist Albert Bandura<sup>277 278</sup> who believed that a person learns through watching the behaviour of others and then models his or her own behaviour on what they have observed. Terre *et al*<sup>210</sup> suggest that exposure alone to others' behaviours may be enough to increase the likelihood of imitation, however SLT adds another element to understanding the behaviour change process. SLT suggests that learning is also mediated by

additional factors including the ability of the observer to relate to the character observed, or have aspirations to be like the character. Bandura's viewpoint differed significantly from earlier theorists because he added this social element (the interaction of personality and emotion between the observer and the observed) to traditional theories of learning<sup>278</sup>. Bandura's SLT (see **table 2.1**) is based around four basic assumption: attention, retention, reproduction, and motivation<sup>278</sup>, with the latter being the main driver of the behavioural influence.

This theory can be used to describe the process of how children and young people learn from the media they are exposed to, and their subsequent behavioural changes or modifications<sup>279</sup>. Several recent researchers<sup>68 209 210 257 280</sup> have demonstrated how SLT can be used to explain the influence on children and young people of exposure to media content. For example, in one study, college students were randomly assigned to play two video games, one a science fiction game involving shooting, and the second a non-violent brick building game. Those who played the first game showed more aggressive thoughts and feelings than those who played the second game<sup>280</sup>. Stern<sup>257</sup> described how smoking, drinking, and drug use shown in teen-centred films may teach young viewers that smoking, drinking and drug use behaviours are relatively common, mostly risk free, and appropriate for anyone. Lowery<sup>281</sup>'s study found alcohol use depicted in daytime television was portrayed as enhancing the enjoyment of social interaction, and reducing stress and tension in crisis situations, and concluded that these portrayals encouraged drinking for social facilitation and crisis management. Atkin<sup>282</sup>, in relation to the effects of televised alcohol messages on teenage drinking patterns, describes that the impact of depictions is enhanced by models that are celebrities, high in status, or similar to viewers. Stern<sup>257</sup> suggests that young viewers may be more likely to learn from teen role models shown on-screen who they perceive to be similar, desirable and

attractive, and others suggest that young viewers are particularly susceptible to learning in this manner as they are still a stage of developing their own personal identities, values and goals<sup>231</sup>.

<b>Table 2.1: Basic concepts of social learning theory in the context of film and television media</b> (Adapted from Bandura <i>et al</i> <sup>276 283</sup> )		
<b>Concept</b>	<b>Description</b>	<b>Example</b>
<b>1. Attention</b>	some persons' behaviour is observed attentively	Paying attention to the behaviours of the characters in a film or television programme
<b>2. Retention</b>	the observer remembers having seen the behaviour observed	The behaviour of the film's or television's character was remembered
<b>3. Reproduction</b>	the observer has the ability and the opportunity to replicate the behaviour observed	The observer of the film's or television's character has the capacity and opportunity to reproduce the behaviour
<b>4. Motivation</b>	the observer is motivated to reproduce the behaviour observed  (e.g. reinforcement)	There is something about the observed behaviour of the film's television's character that motivates the behaviour observed to be copied (eg observed or perceived reward). Direct reinforcement is unnecessary and observed reinforcement is adequate

There is no general consensus among researchers as to how media influences viewers, and alternative theories have been suggested. Some, e.g. Krugman<sup>284</sup>, suggests that the process of behaviour change as a result of viewing media may be more passive than SLT suggests and that unconscious learning might be a better way of explaining the subsequent effects on behaviour. Unconscious learning<sup>229</sup> suggests that the viewer does not directly process any direct cue or message from what is observed on-screen but learning occurs when the observers' screening barriers are low (such as when a viewer is exposed to

products and brands in a programme that they are engaged with) and they are exposed numerous times over a long period of time to the same or similar messages. This process suggests that instead of viewing an advertisement or a message and dismissing it directly, when the observer's screening barriers are low, they will put the observed behaviour into their long term memory. The cues or messages observed would need to be viewed numerous times over a long period to be effective because the messages are suggestive rather than commanding<sup>230</sup>. Diener<sup>230</sup> also suggests that television might be successful in providing tobacco and alcohol cues to audiences (through their frequent depiction) if television is persuasive in forming cultural values. Kielwasser and Wolf<sup>285</sup> suggest that this is particularly so for soap opera audiences who are loyal viewers who continue to watch their favourite programmes over many years and over long periods of their lives with increasing involvement in the programme and characters they watch.

Gerbner *et al*<sup>286</sup> describes a further alternative explanation for the way people learn from television, cultivation theory. Cultivation theory is again a theory of behaviour modelling, and the basic principles are that television viewers use the images that they see and messages that they get from television to make inferences about the everyday life around them. It is argued that this eventually leads to the viewer adopting certain observed behaviours, because they have been normalised through continued, and repeated, observance. It is believed that viewers adopt views that are displayed on television as reality, as opposed to reality itself, that viewers come to believe the television version of reality the more they watch it, and particularly so if they feel an affinity with the characters involved. Waxer<sup>268</sup> has suggested that frequent portrayal of alcohol on television acts to legitimise and normalise its use in society, and uses cultivation theory to explain this, and in Russell *et al*<sup>263</sup>'s exploration into the

nature and impact of alcohol messages in youth oriented television, they describe viewers as developing relationships with on-screen characters making them particularly susceptible and receptive to even subtle alcohol imagery depicted on-screen.

## **2.5 Protecting children and young people from harmful content**

There are several mechanisms by which the tobacco and the alcohol marketing, advertising and promotion, and tobacco and alcohol film and television content in the UK are controlled, limited or prohibited completely, and a brief overview of the main mechanisms will follow.

### ***2.5.1 Regulation of tobacco advertising and marketing***

#### **2.5.1.1 The Framework Convention on Tobacco Control (FCTC)**

The Framework Convention on Tobacco Control (FCTC)<sup>287</sup>, the first worldwide public health treaty on tobacco, was developed by the World Health Organization (WHO). The FCTC has now been signed by 174 countries, including the UK, where it was ratified in 2004. The main purpose of the FCTC is to protect current and future populations from the harmful effects of tobacco through restricting both the supply and the demand for tobacco, and included in Article 13 of the convention is specific guidance on limiting tobacco advertising, promotion and sponsorship.

Article 13 of the FCTC states that as a minimum members must *“prohibit all forms of tobacco advertising, promotion and sponsorship that promote a tobacco product by any means that are false, misleading or deceptive or likely to*

*create an erroneous impression about its characteristics, health effects, hazards or emissions” (p 11<sup>287</sup>), include health warnings in accompaniment to any advertisement, promotion or sponsorship, restrict purchasing incentives, disclosure of any tobacco industry expenditure on advertising, promotion, or sponsorship not yet banned, and restrict if unable to completely ban all tobacco advertising, promotion and sponsorship<sup>287</sup>.*

The WHO, in Article 1 of the FCTC<sup>287</sup>, has defined tobacco advertising and promotion *“as any form of commercial communication, recommendation or action with the aim, effect or likely effect of promoting a tobacco product or tobacco use either directly or indirectly” (p 4<sup>287</sup>)* and tobacco sponsorship as *“any form of contribution to any event, activity or individual with the aim, effect or likely effect of promoting a tobacco product or tobacco use either directly or indirectly” (p 4<sup>287</sup>)*.

#### **2.5.1.2 Tobacco Advertising and Promotion Act (TAPA)**

Restrictions in the UK have been placed on tobacco advertising, promotion and sponsorship resulting in virtually all methods of tobacco advertising, sponsorship, and promotion in the UK being banned since the introduction of the Tobacco Advertising and Promotion Act (TAPA)<sup>64</sup>, banning virtually all direct advertising.

TAPA was first passed in 2002<sup>64 288</sup>, and progressively prohibited advertising in print media, including direct mail, and billboard advertising (February 2003); direct marketing (May 2003); sponsorship of national events (July 2003), limitations on point-of-sale advertising (to one A5 advert per outlet, December 2004); brand-sharing (July 2005); international sponsorship (July 2005); and internet advertising (June 2006). There are however several exceptions such as permitting advertising in trade only magazines, specialist

tobacconist shops, and cigarette packaging (although health warnings on cigarette packages are a legal requirement for tobacco and cigarette packets sold in the UK<sup>289</sup>).

### **2.5.1.3 Master Settlement Agreement (MSA)**

In the US, in November 1998 Master Settlement Agreement (MSA)<sup>290</sup>, an agreement between state attorneys general and major tobacco companies (participating tobacco companies; Philip Morris, Reynolds tobacco, Brown and Williamson Tobacco, Lorillard Tobacco, Liggett Group, and Commonwealth Brands) that limited or ended the use of certain tobacco marketing practices including prohibiting payment for tobacco brand placement in television programmes and feature films in the US. Although this was an agreement that was exclusive to the US, it is relevant here due to the high proportion of films and television programmes produced by US companies being internationally distributed to other countries around the world including the UK.

### **2.5.1.4 Tobacco industry policies**

According to the WHO tobacco atlas<sup>291</sup>, (Chapter 14, Tobacco Companies, p 50), the world's three largest international tobacco manufacturers are Philip Morris (PM) (market share 16.4%, revenue \$47.1bn), British American Tobacco (BAT) (15.4%, \$31.1bn), and Japan Tobacco International (JTI) (7.2%, \$21.6bn). Given that these three companies collectively cover 39% of the market share in tobacco, their advertising and marketing policies will be considered here.

PM company policy, published online<sup>292</sup>, is to support youth prevention efforts including effective regulation, retail access, and educational programmes. PM claim to market and sell to adults only, but also state that they *“do not agree that marketing causes people to smoke”*. In respect to placement in film and television media, PM state that they *“do not engage in product placement in movies or on television—in fact, [they] routinely decline all such requests”* <sup>292</sup>.

On the BAT website<sup>293</sup> the company claims to operate responsibly, that they do not advertise to young people, and where they are permitted to advertise they have strict criteria of what will be excluded, such as celebrity endorsement, use of anyone under the age of 25, and messages that appear to suggest that most people use tobacco products. Also, in the case of cinema, television, radio or film advertising BAT state that *“there is to be no direct or indirect payment or contribution for the placement of tobacco products, advertisements or items bearing tobacco product branding within the body of any Motion picture; Television programme [...] where such medium is intended for the general public”*.

The JTI website states that the company does not advertise to children, and advertises exclusively *“to maintain brand loyalty; to encourage smokers of competitor brands to switch to [their] products; and to provide information about [their] products to adult consumers”*<sup>294</sup>. In their marketing standards, JTI also claim no direct or indirect payment for product placement.

The tobacco industry thus claims consistently to advertise their products only to adult audiences, and not to be involved in product placement activities in either film or television. However, these sources do not explicitly discourage unpaid use of their brands, or of cigarettes, in films and broadcast media,

including media aimed at, or unrestricted to, children and young people's viewership.

## ***2.5.2 Regulation of alcohol advertising and marketing***

### **2.5.2.1 Regulation and self-regulation**

In the UK alcohol advertising, marketing, and promotion is currently governed by a combination of both legislation and self-regulation. A number of organisations act on behalf of the Government's Office of Fair Trading<sup>295</sup> under the Control of Misleading Advertisements Regulations 1988 (MAR)<sup>296</sup>. Advertising in broadcast media is self-regulated through voluntary restrictions set out by the Broadcast Committee of Advertising Practice (BCAP)<sup>297 298</sup> which comprises of advertisers, agencies and media owners<sup>299</sup>, and is administered by the Advertising Standards Authority (ASA)<sup>300</sup>.

Further voluntary measures are managed by the Portman Group, which was established in 1989 and has the support of nine major UK drinks manufacturers (*AB InBev, Bacardi Brown-Forman Brands, Beverage Brands (UK), C&C Group plc, Carlsberg UK, Diageo Great Britain, Heineken UK, Molson Coors Brewing Company (UK), Pernod Ricard (UK)*)<sup>301</sup>. The Portman Group addresses issues of social responsibility, one of their main aims being *"to encourage and challenge drinks producers to promote their products responsibly"*<sup>302</sup>. The group produces codes of practice<sup>303</sup> for members, the first of which was introduced in 1996, but does not govern broadcast advertising, which is the sole responsibility of the BCAP<sup>303</sup>.

### 2.5.2.2 Alcohol industry policies

The leading alcohol companies worldwide that operate within the UK are; Anheuser-Busch (ABInBev), Diageo, Heineken International, and Pernod-Ricard<sup>304-307</sup>. The code of commercial communications for *ABInBev*<sup>308 309</sup>, states that their *“marketing is directed at individuals of legal drinking age and above”* (p 6)<sup>309</sup>, and specifically in relation to product placements they *“will not allow product placement if a character under the legal purchase age is depicted purchasing or drinking alcohol illegally, the motion picture or television show is one for which the majority of the audience is reasonably expected to be below the legal purchase age, and the proposed use in any way might misrepresent AB InBev’s commitment help prevent illegal underage drinking or might reasonably imply that AB InBev condones underage drinking”* (p 16)<sup>309</sup>. However, they additionally make reference to their branded products appearing in programmes and in films without their express permission and that in these circumstances *“as they are neither rewarded nor given permission for by AB InBev, [they are] are not covered by the Commercial Communications Code”* (p 16). Diageo’s marketing code states that they *“place [...] marketing in communications media [...] only where 70% or more of the audience can reasonably be expected to be older than LPA [legal purchasing age]”* (p 5). *Heineken*<sup>310</sup>, in their corporate responsibility strategy, state that their brands *“will not be placed in, or on, media directed primarily at under 18’s”* and they will *“not promote...[Heineken brands]...in media, events or programmes where the majority of the audience are known to be under 18”* (Heineken webpage)<sup>311</sup>. In Pernod-Ricard’s code for commercial communication, they also state that they do not market to or make reference to those under the legal drinking age, and that they will only market to an audience when at least 70% is at least the legal drinking age, and that their

marketing and advertising will not be made to appeal to those under the legal drinking age.

### **2.5.3 Regulation of film content**

There has been concern over the impact of various types of media on people in general and on children and young people in particular over the years and this is evident when looking at the history of censorship<sup>312</sup>. Censorship of film content was introduced officially in the UK in 1912, but the first known example of censorship in practice was in 1898, when an early film about cheese was withdrawn from broadcast in response to public protests<sup>312</sup>. In 1912 the British Board of Film Censors was established by the film industry, but overseen by a Home Office appointed leader.

#### **2.5.3.1 The British Board of Film Classification**

The British Board of Film Classification (BBFC) is the independent regulatory body funded by the fees charged for the age classification of films, videos and digital media games in the UK<sup>253</sup>. The BBFC serves a function for the government, the media industry and the general public. The BBFC serves four main functions for the government, the public, and those working in the media industry<sup>253 313</sup>. To the government they act as a regulator on behalf of local authorities, who licence cinemas under the Licensing Act 2003<sup>170</sup>. To the public they provide both information to assist them in making appropriate viewing decisions for themselves and those in their care, and also they help to protect vulnerable viewers and society from the effects of viewing potentially harmful or unsuitable content while concurrently respecting adult freedom of choice. To those working

in the media industries they provide the security and confidence of cost-effective, publicly trusted regulation and help to protect media industry providers from inadvertent breaches of UK law.

The BBFC was established<sup>314</sup> to standardise classification of films broadcast at cinema, and has since taken responsibility for video, DVD, and moving games classifications. Before 1912, individual local authorities were applying their own, and often broadly different, restrictions on standards and censorship. Until 1998 the BBFC policy decisions were based on policy that evolved through practice. The first set of film classification guidelines were produced in 1998 and the BBFC has published guidelines, which are updated regularly, ever since; most recently in 2009<sup>315</sup>. Changes to the classification process are based on new legislation, technology development, the social and historical climate, and changes in social attitudes.

A full history of the evolution of the BBFC and the classification process can be found on their website<sup>314</sup> and a summary of the changes in classification over the years can be seen in **table 2.2**, however as this research only looked at films that were released in UK cinemas from 1989 until 2008 a short summary will follow of the changes to film classification during that time period.

In 1989, a '12' certification was introduced for the first time with the aim of bridging the gap between 'PG' and '15' classifications. In 2002 a "12A" category of classification replaced the "12" category which allowed children under 12 years to see films classified as 12 when they were accompanied by a responsible adult. Alongside this change from "12" to "12A" came the introduction of consumer advice information for this category to help parents to make informed choices about the films they let their children see. Consumer advice information generally constituted a single sentence (eg "Contains strong

language") on film posters, advertisements and cinema listings. Provision of consumer advice information was extended to all film rating categories from 2004.

When classifiers are applying the principles of the BBFC guidelines, they use three main qualifications. Firstly, whether the material is in conflict with the law, secondly, whether the material, either on its own, or in combination with other content of a similar nature, may cause any harm at the category concerned, and thirdly, whether the material, at the age group concerned, is clearly unacceptable to broad public opinion.

**Table 2.2 A summary of changes to BBFC film classification: (Adapted from the BBFC's guide for Students)<sup>314</sup>**

Year	Unrestricted category	Advisory category	Restrictive category
1912	U - Universal	A – More suitable for adults	none
1921	-	-	no entrance to young people to "A" films except with a parent or guardian (London only)
1932	-	H – indicated horror	-
1951	-	-	X – incorporated former "H", and no admittance of those under 16 years
1970	U - Universal	A - advised parents that film may be unsuitable for young children	AA - admission to 14 years or over X – age raised from 16 to 18 years
1982	U - Universal	PG – (Parental Guidance) general viewing but some scenes may be unsuitable for young children	15 - no person under the age of 15 to be admitted 18 - no person under the age of 18 to be admitted R18 - for films containing more explicit sexual depictions
1985	Uc – Universal films particularly suitable for unsupervised children U - Universal	PG – (Parental Guidance) general viewing but some scenes may be unsuitable for young children	15 - suitable only for persons of 15 years and over 18 - suitable only for persons of 18 years and over R18 - restricted to distribution in licensed premises – no one under 18 to be admitted
1989	-	-	12 - no person under the age of 12 to be admitted
1994	-	-	12 - suitable only for persons of twelve and over
2002	-	-	12A – no one younger than 12 may see a 12A film in a cinema unless accompanied throughout by an adult, replaces "12" category

In relation to tobacco content, the current BBFC Guidelines on classification<sup>315</sup> state only that where "*[smoking and tobacco use] feature to a significant extent in works which appeal to children, this will normally be indicated in the Consumer Advice and/or Extended Classification Information. Classification decisions will also take into account any promotion or glamorisation of such activities.*" (p. 12 and 13)<sup>315</sup>.

Concerning alcohol, the BBFC Guidelines on classification<sup>315</sup> state "*where [...] alcohol abuse [...] feature to a significant extent in works which appeal to children, this will normally be indicated in the Consumer Advice and/or Extended Classification Information. Classification decisions will also take into account any promotion or glamorisation of such activities.*" (p. 12 and 13)<sup>315</sup>.

In addition, there are several places within the BBFC Guidance where tobacco and alcohol content could also be included in the classification, such as the sections covering "*imitable behaviour*". In both the Universal and Parent Guidance categories, imitable behaviour is referenced and the guidance states that "*No potentially dangerous behaviour which young children are likely to copy.*" (p 21 and 23). However, the only direction provided with this is in reference to violence and weaponry. In the 12/12A and 15 categories imitable behaviour is also referenced, and this time gives very specific examples, none relating to either tobacco or alcohol "*Dangerous behaviour (for example, hanging, suicide and self-harming) should not dwell on detail which could be copied, or appear pain or harm free. Easily accessible weapons should not be glamorised.*" (p 25 and 27).

## **2.5.4 Regulation of television content**

The regulation of television content is the responsibility of two separate bodies: Ofcom, who regulate the content of television programming broadcast; and the Advertising Standards Authority (ASA) which regulates the advertisements broadcast on television.

### **2.5.4.1 Ofcom**

Ofcom is the communications regulator in the UK which operates under the Communications Act 2003<sup>100</sup> and the Broadcasting Act 1996<sup>316</sup>, and whose actions are accountable in Parliament<sup>317</sup>. As part of their role as communications regulator, they regulate television broadcasting in the UK and one of their legal responsibilities is to ensure *“people who watch television [...] are protected from harmful or offensive material”*<sup>317</sup>. They are not responsible for the content of televised advertisements<sup>317</sup>, as this is administered by the BCAP<sup>297</sup> through the ASA<sup>300</sup>. Ofcom publishes The Ofcom Broadcasting Code (Incorporating the Cross-promotion Code)<sup>101</sup> which is updated regularly, giving guidance to broadcasters.

The Ofcom Broadcasting Code<sup>101</sup> states the rules of broadcasting that broadcasters must follow, however it is the responsibility of the broadcaster to comply with the code, and Ofcom will address breaches of the code reactively when they arise. The first section of the code; Section 1: Protecting the Under-Eighteens has the basic principle to protect those under 18, and the main points relevant to this section will be provided below, particularly with regard to tobacco and alcohol content.

This section states; *“Material that might seriously impair the physical, mental or moral development of people under eighteen must not be broadcast”*,

and “broadcasters must take all reasonable steps to protect people under eighteen” (p 7)<sup>101</sup>, and also that “Children [defined by Ofcom as under the age of 15] must also be protected by appropriate scheduling from material that is unsuitable for them” (p 7)<sup>101</sup>. Appropriate scheduling is judged by five distinct criteria; see **table 2.3**. Additionally broadcasters must adhere to the watershed which is 9 pm, and material unsuitable for children should not, in general, be shown outside of the hours 9pm until 5.30 am. BBFC 18 classified films are not permitted to be broadcast before the watershed.

<b>Table 2.3:</b>	
<b>Criteria used to judge appropriate scheduling</b> (Adapted from The Ofcom Broadcasting Code, p 7) <sup>101</sup>	
<b>1.</b>	nature of the content
<b>2.</b>	the likely number and age range of children in the audience
<b>3.</b>	the start time and finish time of the programme
<b>4.</b>	the nature of the channel or station and the particular programme
<b>5.</b>	the likely expectations of the audience for a particular channel or station at a particular time and on a particular day

Additionally, the first section of the code gives specific consideration to smoking and alcohol, and in general “The use of illegal drugs, the abuse of drugs, smoking, solvent abuse and the misuse of alcohol must not be featured in programmes made primarily for children unless there is strong editorial justification” (p 9)<sup>101</sup>, “must generally be avoided and in any case must not be condoned, encouraged or glamorised in other programmes broadcast before the watershed [...] unless there is editorial justification”(p 10)<sup>101</sup>, and “must not be

*condoned, encouraged or glamorised in other programmes likely to be widely seen or heard by under-eighteens unless there is editorial justification" (p 10)<sup>101</sup>.*

#### **2.5.4.2 Advertising Standards Authority**

As tobacco advertising is prohibited on television in the UK, a summary of what the Advertising Standards Authority (ASA) states in relation to alcohol advertising will be included. Alcohol advertising on television is governed by the Broadcast Committee of Advertising Practice (BCAP) through the Advertising Standards Authority (ASA)<sup>300</sup>, whose members consist of advertisers, agencies and media owners<sup>299</sup>. It is the responsibility of advertisers to adhere to the rules of the code, and ASA only intervenes reactively when complaints are received. The BCAP are the advertising industry self-regulatory board who set the UK Code of Broadcast Advertising code (BCAP code<sup>297 298</sup>) which states that alcohol advertisements must not; *"be likely to appeal strongly to people under 18, especially by reflecting or being associated with youth culture or showing adolescent or juvenile behaviour"* (section 19: Alcohol)<sup>297</sup> and *"include a person or character whose example is likely to be followed by those aged under 18 years or who has a strong appeal to those aged under 18"* (section 19: Alcohol)<sup>297</sup>. In addition to this they have set some specific rules over the content of the advertisements, such as *they "must not feature in a significant role anyone who is, or seems to be, under 25 and must not feature children"* (section 19: Alcohol)<sup>297</sup>, however this rule is accompanied by an exception whereby advertisements that feature families socialising and drinking sensibly, as long as only those over the age of 25 are seen drinking then children are allowed to feature in the advertisement. They further make specific reference to the scheduling of alcohol advertisements; *"These may not be advertised in or*

*adjacent to programmes commissioned for, principally directed at or likely to appeal particularly to audiences below the age of 18”.*

## **2.6 Summary**

Earlier studies have linked smoking in films with youth smoking<sup>67 71 73-75 195-197 199 201</sup>, and alcohol appearances in films with underage drinking behaviours<sup>179 251</sup>, including binge drinking<sup>71</sup>. Although fewer studies have suggested links between television smoking<sup>210 228-230</sup> and television alcohol drinking<sup>258 259</sup> with youth uptake, young people who watch greater amounts of television are more likely to initiate smoking<sup>77</sup>, and exposure to greater amounts of alcohol advertising and promotions is associated with initiating alcohol drinking<sup>175 177 249 250</sup>.

Previous research has shown that tobacco has been frequently found in films and on television (e.g.<sup>179 208-211 218 229 230 236 237 241-247 262 265 266 268-272 318-323</sup>), however none of these studies have specifically investigated the tobacco or alcohol content of films popular in the UK, and the studies that have investigated tobacco and alcohol content in British television broadcasting were mainly carried out in earlier decades, with the more recent studies being very specific in nature (e.g. British soap operas<sup>318</sup>).

The most frequently cited theory used to explain the process of how children and young people learn smoking and drinking behaviours from media is social learning theory<sup>68 209 210 257</sup> which is based around four basic assumptions: attention, retention, reproduction, and motivation<sup>278</sup>. There is however no general consensus among researchers and theorists as to how media effects viewers behaviour, and other theories have been used to describe the process e.g. unconscious learning<sup>284</sup> or cultivation theory<sup>286</sup>.

There are several means by which the tobacco and the alcohol marketing, advertising and promotion, and tobacco and alcohol film and television content in the UK are controlled, limited or prohibited completely including: international policy (FCTC)<sup>287</sup>; legislation (TAPA, MSA, MAR, the Licensing Act, the Communications Act and the Broadcasting Act)<sup>64 100 170 290 296 316</sup>; tobacco industry policies<sup>292-294</sup>; voluntary regulation (BCAP and Portman Group)<sup>297 298 301</sup>; regulation of film content (BBFC)<sup>253</sup> and television content (Ofcom)<sup>317</sup>.

## Chapter 3: Methods

### 3.1 Methods used in other papers

To identify which would be the most appropriate methods to use in the studies in this thesis, it was necessary to review the methods that had been used previously in earlier studies of tobacco and alcohol content in film and television. The sampling, coding and recording methods previously used in earlier research were therefore identified, reviewed and considered for their relevance and appropriateness in addressing the aims and objectives of the current research.

#### Film

Earlier research has looked at the occurrence of tobacco<sup>75 195 207-215 218-222 224-227 257</sup> [see **table 3.1**], alcohol<sup>179 209 210 218-220 225 251 255-257 324</sup> [see **table 3.2**], and other substance use, behaviours and content in films. Some of the other substance use, behaviours and content that has been the focus of earlier film content investigations have included: over-the-counter or prescription drug use, illegal drug use, physical activity, poor eating habits<sup>210</sup>; illicit drugs<sup>219 225</sup>; sexual content<sup>325</sup>; sex and drugs<sup>326</sup>; branded soft drinks<sup>327</sup>; violence<sup>328</sup>; violence, sex, and profanity<sup>329</sup>; portrayal of women<sup>330</sup>; general brand placements<sup>331</sup>; racism<sup>332</sup>; fat stigmatization<sup>333</sup>; and psychiatric disability<sup>334</sup>.

There are similarities and distinctions between the methods used in these studies in many respects, including the selection of films for study, coding systems and recording methods employed. With regards to earlier studies that looked at tobacco and alcohol in film, the key points and themes are summarised below, **3.1.1 Sampling, coding, and recording in earlier research on film content**.

## Television

Earlier research has investigated tobacco<sup>229-231 236-244 246-248 265 335 336</sup> [see **table 3.3**] and alcohol<sup>229-231 236 240-242 244 247 262 263 265-272 323</sup> [see **table 3.4**] in television broadcasting, as well as other substance use, behaviours and other content. Some of the other studies that have investigated the content of television broadcasting have focused on the following in their content analysis: food product health claims<sup>337</sup>; older people<sup>338</sup>; sport<sup>339</sup>; offensive language<sup>340</sup>; violence<sup>341</sup>; snack food and snack food packaging aimed at children<sup>342</sup>; food advertising<sup>343</sup>; health content in local television news<sup>344</sup>; advertising music<sup>345</sup>; gay, lesbian, and bi-sexual content<sup>346</sup>; and the use of humour and aggression<sup>347</sup>.

As with film, there are similarities and distinctions between the methods used in these studies, including the selection of television programmes and other broadcasts for study, the coding systems used for the content of interest, and the recording methods employed. The key points and themes, in relation to tobacco and alcohol content on television, are summarised below.

### ***3.1.1 Sampling, coding, and recording in earlier research on film content***

#### **3.1.1.1 Film sampling**

The samples of films selected for inclusion in earlier studies, particularly those concerning tobacco and alcohol, were most frequently based on each film's earnings at cinema box offices, although other selection methods have been used (e.g. Goldstein *et al*<sup>218</sup> selected films originating from the major US animation production companies, and Escamilla *et al*<sup>224</sup> sampled films by the popularity of the leading actresses who starred in them, based on the actresses frequency of appearance in magazines popular among young women). The most

frequently explored films having been those most successful at either the US or worldwide box offices (e.g. Terre *et al*<sup>210</sup> , Hazan *et al*<sup>207</sup> , Dalton *et al*<sup>208</sup>) although those films successful in other regions have also occasionally been investigated. For example, Hanewinkel and Sargent<sup>75</sup> were interested in films that were popular at the German cinema box office, however even then they were specifically interested in internationally distributed American films that were found to be popular at the German box office. They selected their sample of films, totalling 398 films, from the top 25 German box-office hits each year from 1994 to 2001, as well as from the top 100 German box office hits from 2002 to 2004 films.

Another example is the research carried out by Thrasher *et al*<sup>195</sup> who sampled films popular in Mexico, based on each film's earnings at the Mexican cinema box office. Films were selected from the top 50 grossing films each year from 2003 to 2005 as well as the top 60 each year from 2000 to 2002 (totalling 330 films). No earlier research has specifically been interested in, or exclusively explored, films that were successful at the UK cinema box office.

Films released as far back as the late 1930's have been investigated for their content of tobacco and alcohol. Goldstein *et al*<sup>218</sup> looked at tobacco portrayed in youth rated (US G-rated) animated films from the 1930's until the 1990's. Thompson and Yokota<sup>219</sup> also looked at youth rated animation films, but in addition to tobacco content, they were also interested in alcohol and other substances; again they investigated films from 1930's onwards. From earlier research, the most recent films investigated were those released in 2005 (tobacco)<sup>195</sup> , and 2004 (alcohol)<sup>179</sup>. Thrasher *et al*<sup>195</sup> looked at tobacco content in films released during the first half of the 2000's, with the ultimate aim of estimating adolescent exposure to tobacco in films, while Hanewinkel *et al*<sup>179</sup> looked at alcohol content in films released between the mid-90's and 2004 with

the intention of identifying an association between adolescent exposure to alcohol in films and adolescent alcohol use.

In addition to the eras investigated, studies to date have also varied in the number of years covered, ranging from one year to 64 years. Teti & Glantz<sup>212</sup>, interested in tobacco occurrence, only looked at one year's films (1997) in their study, however they added their findings to earlier works when reporting their findings<sup>207 211</sup>, as this study was carried out as part of a wider investigation. Hazan *et al*<sup>207</sup> covered 31 years from 1960 to 1990 in their earlier study, and Stockwell and Glantz<sup>211</sup> followed this up by including the seven years from 1990 to 1996. Teti & Glantz<sup>212</sup> therefore reported on tobacco in film over the thirty-seven year period from 1960 up until 1997. Two further additions were made to this research, firstly a further three years were included (1997-2000)<sup>213</sup> and then a subsequent 12 years<sup>215</sup>, this time including films released earlier (1950-1959), and later (2001 and 2002), ultimately reporting on all the films they investigated in their studies from 1950 up until 2002, covering 53 years of popularly viewed films in the US.

The widest ranging study solely investigating alcohol content in film was carried out by McIntosh *et al* in 1999<sup>256</sup>, and covered films from a 50 year period, 1940-1989. These researchers were specifically interested in commonalities and differences in the characteristics of alcohol drinking characters and non-alcohol drinking characters in films, and comparisons to actual drinkers in the US. The narrowest time periods covered exclusively investigating alcohol content in film were carried out by DalCin *et al*<sup>178 255</sup>, whose research covered six years, 1998 to 2003, and investigated alcohol use and alcohol branding in films, as well as adolescent exposure to film alcohol use as a mediating factor of adolescent alcohol use.

The most expansive time period covered in a single study was carried out by Thompson and Yokota<sup>219</sup> who were exploring tobacco, alcohol and other substances in animated films aimed at young children (US G-rated) in sixty-four years of film, from 1937 until 2000.

In addition to variation in the years investigated, the number of films being investigated in each study has also varied considerably, ranging from five films to 900 films. Teti & Glantz<sup>212</sup> only included five films in their study, but as previously described they went on to add their findings from this investigation to both earlier and later research. The largest number of films included in any one study was 900, in a study undertaken by Worth *et al*<sup>222</sup>, with the main focus of their study being to estimate the prevalence of smoking among major film characters between 1996 and 2004.

### **3.1.1.2 Film coding**

Coding schemes used for exploring tobacco [see **table 3.1**] and alcohol [see **table 3.2**] content in films have varied considerably between studies. While several studies have been interested in either or both tobacco and alcohol content in films, there have been differences in the specific aspects of the content, and as a result there has been considerable variation in how the content has been coded. For example, both Hazan *et al*<sup>207</sup> and Mekemson *et al*<sup>214</sup> were interested in tobacco content in film, however Hazan *et al*<sup>207</sup> defined tobacco content as tobacco events, and included *“implied or actual consumption of tobacco, paraphernalia, (ashtrays and matches), talking about tobacco, ‘no smoking’ signs, and tobacco product logo’s”* (p 998<sup>207</sup>), whilst Mekemson *et al*<sup>214</sup> limited their coding to tobacco use, defined as *“any cigarette, cigar, and chewing tobacco use as well as the display of smoke and cigarette paraphernalia such as*

*ashtrays, brand names, or logos*" (p 400). Mekemson *et al*<sup>214</sup> therefore excluded all forms of pipe smoking, any form of implied smoking, no smoking signs, and verbal references, which the former study included. Others limited their research further to very specific tobacco and tobacco related content, such as smoking by leading Hollywood actresses<sup>224</sup>, tobacco branding<sup>226 227</sup>, and major film characters<sup>222</sup>.

Similar differences existed in the investigations of alcohol content in films. For example, Terre *et al*<sup>210</sup> coded films for possession, implied use, actual use, and protagonist characteristics, while Everett *et al*<sup>209</sup>, although also included implied or actual consumption of alcohol, they also included paraphernalia, verbal references, and product logo's. Hanewinkel *et al*<sup>74</sup> coded for alcohol use using the definition *"real or implied use of an alcoholic beverage by any character in the film, including purchasing alcohol, or occasions where alcohol is clearly in the possession of a character [...] but actual use was not shown"* (p 1069), and excluded all references to alcohol where neither actual nor implied use was evident. Therefore, unlike Everett *et al*<sup>209</sup>, Hanewinkel and colleagues<sup>74</sup> did not include brand or product appearances, and Terre *et al*<sup>210</sup> only did if they were in the possession of a character.

The differences in the coding schemes used above reflect differences in the aims and objectives of the studies. For example, some research has, like here, been interested in showing the occurrence of tobacco and/or alcohol depicted on-screen (e.g. Hazan *et al*<sup>207</sup>, Everett *et al*<sup>209</sup>), whilst others have been interested in the context of the substance (e.g. Dalton *et al* were interested in the incidence as well as the context of tobacco use in popular films<sup>208</sup>), and others have been interested in the effect these presentations have on the viewing audiences (e.g. Dalton *et al*<sup>73</sup>, Hanewinkel *et al*<sup>74</sup>).

### 3.1.1.3 Film recording

Although there have been differences in the recording methods used by researchers undertaking these earlier studies on tobacco and alcohol in films, all of these previous studies have used some method of time sampling measurement (TSM).

TSM measures vary from relatively continuous measures delimiting behavioural events in fractions of seconds or seconds (e.g. Goldstein *et al*<sup>218</sup>, who recorded tobacco and alcohol use using continuous methods, additionally timing these behaviours in seconds), to interval recording delimited by a longer set period of time (e.g. Hazan *et al*<sup>207</sup>, who recorded tobacco use behaviours using five-minute interval recording). Other researchers have used some combination of the different methods, such as Stockwell and Glantz<sup>211</sup> who combined five-minute interval recording with intervals delimited by the beginning and ending of scenes.

However, when investigating tobacco and alcohol behaviours in films, the most frequently used method of time sampling measurement has been that of pre-defined five-minute intervals. This type of TSM recording involves the observer recording pre-defined behaviours, or appearances, as occurring if they occurred at some point during the pre-determined five-minute interval time period<sup>348 349</sup>. Many previous researchers<sup>207 209-213 215 224 225</sup> have used this type of measurement, for detecting the presence or absence of tobacco and alcohol content within each five minutes of the films they viewed.

Other researchers have used different approaches; such as Mekemson *et al*<sup>214</sup> who used interval recording for each individual minute of film, Dalton *et al*<sup>208</sup>, Worth *et al*<sup>222</sup>, and Hanewinkel *et al*<sup>74</sup> used scene changes as opposed to

pre-defined intervals; and others, for example Goldstein *et al*<sup>218</sup>, and Adachi-Mejia *et al*<sup>227</sup> used relatively continuous methods of measurement.

<b>Table 3.1:</b>					
<b>Summary of sampling and coding used in other research investigating tobacco in film</b>					
<b>Author/s (date published)</b>	<b>Years investigated (Nos. of years)</b>	<b>Nos. of films</b>	<b>Region</b>	<b>Unit measure</b>	<b>Outcome measures/exclusions</b>
Terre <i>et al</i> (1991)	1977-1988 (10)	200	US	five-minute intervals	<ul style="list-style-type: none"> <li>cigarette smoking – (possession only, suggested use only, overt act shown)</li> <li>other characteristics (characters SES, gender etc), personal (likeability, clout etc), &amp; outcomes (+ve or -ve health consequences of behaviour)</li> </ul>
Hazan <i>et al</i> (1994)	1960-1990 (31)	62	(probably) US	five-minute intervals	<ul style="list-style-type: none"> <li>tobacco events (including implied/actual use, paraphernalia (e.g. ashtrays), talking about tobacco, no-smoking signs, product logo's)</li> </ul>
Stern (2005)	1999-2001 (3)	43	US	characters	<ul style="list-style-type: none"> <li>cigarette smoking by teenage characters central to the films plot</li> </ul>
Stockwell & Glantz (1997)	1990-1996 (7)	35	US	five-minute intervals & scenes	<ul style="list-style-type: none"> <li>tobacco events including, implied or actual consumption, paraphernalia (e.g. matches), talking about tobacco (positive and negative), product logo's, no-smoking signs</li> <li>contextual factors: such as type of scene (e.g. stressful), character role</li> </ul>
Teti & Glantz (1998)	1997 (1)	5	US	five-minute intervals	<ul style="list-style-type: none"> <li>tobacco events, as Hazan <i>et al</i> (1994) and Stockwell &amp; Glantz (1997)</li> </ul>
Everett <i>et al</i> (1998)	1985-1995 (11)	110	US	five-minute intervals	<ul style="list-style-type: none"> <li>tobacco events – implied or actual consumption of tobacco, paraphernalia (ashtrays&amp; matches), talking about tobacco, no smoking signs, &amp; tobacco product logo's</li> <li>pr- or anti- tobacco events</li> </ul>
Goldstein <i>et al</i> (1999)	1937-1997 (51)	50	US	continuous	<ul style="list-style-type: none"> <li>Tobacco and type of tobacco present</li> <li>Length of time visible on screen in seconds</li> <li>Tobacco users character &amp; qualities (good, bad etc)</li> <li>Related health messages</li> </ul>
Roberts <i>et al</i> (1999)	1996-1997 (2)	200	US	five-minute intervals	<p><u>Included</u></p> <ul style="list-style-type: none"> <li>tobacco consumption, implied consumption, including verbal references</li> <li>age of tobacco user</li> <li>tobacco appearances – tobacco or related paraphernalia, brands or generic bar or cocktail signs</li> <li>was tobacco central to the films theme, were pro-or anti-tobacco messages present, were consequences of use depicted</li> </ul> <p><u>Excluded</u></p> <ul style="list-style-type: none"> <li>Reference to past use</li> </ul>
Escamilla <i>et al</i> (2000)	1993-1997 (5)	50	US	five-minute intervals	<ul style="list-style-type: none"> <li>the portrayal of smoking by 10 leading Hollywood film actresses</li> <li>smoking episodes (actual or implied, paraphernalia, environmental messages (e.g. advertisements)</li> <li>smoker characteristics (e.g. role in film, gender), location, and social context (e.g. alone), verbal/non-verbal references</li> </ul>
Kacirk & Glantz (2001)	1997-2000 (4)	20	US	five-minute intervals	<ul style="list-style-type: none"> <li>tobacco events, as Hazan <i>et al</i> (1994), Stockwell &amp; Glantz (1997), and Teti &amp; Glantz (1998)</li> </ul>
Sargent <i>et al</i> (2001)	1988-1997 (10) five years pre- and five years	250	US	continuous	<ul style="list-style-type: none"> <li>tobacco brand appearances (brand name, logo or identifiable trademark) on products, product packaging, billboards, store front advertising, promotional items</li> <li>appearance characteristics -brand endorsement (when used by a character), or in the background</li> </ul>

	post- voluntary agreement				
Thompson & Yokota (2001)	1937-2000 (64)	81	US	continuous	<ul style="list-style-type: none"> <li>incidents of tobacco on screen (in seconds)</li> <li>characters using tobacco and their nature</li> <li>related health messages</li> </ul>
Dalton <i>et al</i> (2002)	1988-1997 (10)	250	worldwide box office	scenes & continuous	<p><u>Included</u></p> <ul style="list-style-type: none"> <li>tobacco used or handled on screen</li> <li>character use: major, minor, background</li> <li>context of tobacco use (relevance, motivation, concurrent activities)</li> </ul> <p><u>Excluded</u></p> <ul style="list-style-type: none"> <li>paraphernalia and adverts</li> </ul>
Mekemson <i>et al</i> (2004)	1991-2001 (10)	497	domestic box office (US)	single minutes	<ul style="list-style-type: none"> <li>tobacco incidents: any cigarette, cigar, and chewing tobacco use and the display of smoke and cigarette paraphernalia (e.g. ashtrays), brand names, or logo's within frames of films reviewed</li> <li>number of lead actors who smoked</li> </ul>
Glantz <i>et al</i> (2004)	1950- 1959 (10) & 2001-2002 (2)	30	US	five-minute intervals	<ul style="list-style-type: none"> <li>tobacco incidents: smoking, advertisements, ashtrays</li> </ul>
Stern (2005)	1999-2001	43	US	central teen characters	<ul style="list-style-type: none"> <li>central teen character tobacco use frequency (not at all, once or more than once)</li> <li>consequence of use</li> <li>health messages</li> </ul>
Adachi-Mejia <i>et al</i> (2005)	1996-2003 (8)	800	US	continuous	<ul style="list-style-type: none"> <li>tobacco brand appearances</li> <li>brand identities</li> </ul>
Omidvari <i>et al</i> (2005)	1990-1998 (9)	447	US	continuous	<ul style="list-style-type: none"> <li>main character smoking (top 5 in each film), and character characteristics (e.g. SES, gender)</li> </ul>
Worth <i>et al</i> (2006)	1996-2004 (9)	900	worldwide	continuous	<ul style="list-style-type: none"> <li>smoking status of major human adult and adolescent film characters</li> </ul>
Aina & Olorunshola (2007)	2006 (0.5)	497	Nigeria	scenes	<ul style="list-style-type: none"> <li>smoking in scenes in the popular video tapes in both English and Yoruba (a popular Nigerian language)</li> </ul>
Hanewinkel <i>et al</i> (2008)	1994-2004 (11)	398	Germany	scenes & exposure time	<p><u>Included</u></p> <ul style="list-style-type: none"> <li>tobacco used or handled on-screen</li> <li>character use: major, minor, background</li> <li>context of tobacco use (relevance, motivation, concurrent activities)</li> </ul> <p><u>Excluded</u></p> <ul style="list-style-type: none"> <li>paraphernalia and adverts</li> </ul>
Thrasher <i>et al</i> (2008)	2000-2005 (6)	42	Mexican box office	continuous	<ul style="list-style-type: none"> <li>tobacco screen time was measured in seconds and including smoking, products, packaging, environmental tobacco smoke</li> </ul>
NB: linked studies are shown in grey					

<b>Table 3.2:</b>					
<b>Summary of sampling and coding used in other research investigating alcohol in film</b>					
<b>Author/s (date published)</b>	<b>Years investigated (nos. of years)</b>	<b>Nos of films</b>	<b>Region</b>	<b>Unit measure</b>	<b>Outcome measures/exclusions</b>
Terre <i>et al</i> (1991)	1977-1988 (10)	200	US	five-minute intervals	<ul style="list-style-type: none"> <li>alcohol consumption – (possession only, suggested use only, overt act shown)</li> <li>other characteristics (characters SES, gender etc), personal (likeability, clout etc), &amp; outcomes (+ve or -ve health consequences of behaviour)</li> </ul>
Stern (2005)	1999-2001 (3)	43	US	characters	<ul style="list-style-type: none"> <li>alcohol using teenage characters central to the films plot</li> </ul>
Everett <i>et al</i> (1998)	1985-1995 (11)	110	US	five-minute intervals	<ul style="list-style-type: none"> <li>alcohol events – implied or actual consumption of alcohol, paraphernalia, talking about alcohol, &amp; alcohol product logo's</li> <li>pro- or anti- alcohol events</li> </ul>
Goldstein <i>et al</i> (1999)	1937-1997 (51)	50	US	continuous	<ul style="list-style-type: none"> <li>alcohol and type of alcohol present</li> <li>Length of time visible on screen in seconds</li> <li>alcohol users character &amp; qualities (good, bad etc)</li> <li>related health messages</li> </ul>
Roberts <i>et al</i> (1999)	1996-1997 (2)	200	US	five-minute intervals	<p><u>Included</u></p> <ul style="list-style-type: none"> <li>alcohol consumption, implied consumption, including verbal references</li> <li>age of user</li> <li>substance appearances – alcohol or related paraphernalia, brands or generic bar or cocktail signs</li> <li>was alcohol central to the films theme, were pro-or anti-alcohol messages present, were consequences of use depicted</li> </ul> <p><u>Excluded</u></p> <ul style="list-style-type: none"> <li>reference to past use</li> </ul>
McIntosh <i>et al</i> (1999)	1940-1989 (50)	100	US	continuous	<ul style="list-style-type: none"> <li>alcohol use – defined as actual or implied</li> <li>drinker characteristics (e.g. attractiveness, aggressiveness), characters outcome at the end of the film</li> </ul>
Thompson & Yokota (2001)	1937-2000 (64)	81	US	continuous	<ul style="list-style-type: none"> <li>incidents of alcohol on-screen (in seconds)</li> <li>characters using alcohol and their nature</li> <li>related health messages</li> </ul>
Stern (2005)	1999-2001	43	US	central teen characters	<ul style="list-style-type: none"> <li>central teen character alcohol use frequency (not at all, once or more than once)</li> <li>consequence of use</li> <li>health messages</li> </ul>
Sargent <i>et al</i> (2006)	1988-1997 (10)	601	US	continuous	<ul style="list-style-type: none"> <li>on-screen alcohol use</li> </ul>
Hanewinkel <i>et al</i> (2007)	1994-2004 (11)	226	Germany	continuous	<p><u>Included</u></p> <ul style="list-style-type: none"> <li>real or implied use of an alcohol beverage by any film character, including purchasing or in their possession</li> </ul> <p><u>Excluded</u></p> <ul style="list-style-type: none"> <li>Empty alcohol containers, and those displayed but not related to use or implied use were not considered.</li> </ul>
Aina & Olorunshola (2007)	2006 (0.5)	497	Nigeria	scenes	<ul style="list-style-type: none"> <li>drinking in scenes in the popular video tapes in both English and Yoruba (a popular Nigerian language)</li> </ul>
Dal Cin <i>et al</i> (2008)	1998-2003 (6)	134	US	continuous	<p><u>Included</u></p> <ul style="list-style-type: none"> <li>alcohol use – real or implied use of an alcoholic beverage including purchasing and possession, type of alcohol, intoxication, duration of use, brand appearances (background, verbal, or use)</li> </ul>

					<u>Excluded</u> <ul style="list-style-type: none"> <li>• empty alcohol containers, and those displayed but not related to use or implied use were not considered</li> </ul>
Dal Cin <i>et al</i> (2009)	1998-2003 (6)	523	US	continuous	<u>Included</u> <ul style="list-style-type: none"> <li>• Characters actual consumption onscreen, implied possession of a beverage, purchasing an alcoholic drink</li> </ul> <u>Excluded</u> <ul style="list-style-type: none"> <li>• Empty alcohol containers, and those displayed</li> </ul>

### **3.1.2 Sampling, coding, and recording in earlier research on television**

#### **3.1.2.1 Television sampling**

The sampling selection criteria used in earlier studies investigating tobacco [see **table 3.3**] and alcohol [see **table 3.4**] on television varied considerably. Many of the studies sampled particular genres or specific programmes; for example, Greenberg *et al*<sup>231</sup> selected two separate television series seasons, one 1976-1977 and the other 1977-1978, broadcasting on three commercial channels, and the sample included one episode of each prime-time and Saturday morning fictional series. Additionally, these researchers excluded several programme genres from their investigation, such as variety shows, public affairs, films, and sports. Madden and Grube<sup>241</sup> were interested in televised sporting events and therefore limited their sample to these types of broadcasts. Other examples include Blair *et al*<sup>240</sup> who were only interested in the reality television series, *The Osbournes*, while Hanewinkel and Wiborg<sup>239</sup> were only interested in one specific fictional German television crime series, *A case for two*, and Russell *et al*<sup>263</sup> in one particular television drama series known to be popular among young people, *The O.C.*.

Other studies based their sample on the country where the programmes were broadcast. For example McGee *et al*<sup>335</sup> were interested in television broadcast in New Zealand, Long *et al*<sup>265</sup> were interested in US television, and Kanda *et al*<sup>248</sup> were interested in Japanese television. Smith *et al*<sup>269</sup> were interested in British television broadcasting, and Furnham *et al*<sup>270</sup>, also interested in British television, additionally were interested in six soap operas popular in Britain (*Neighbours*, *Home and Away*, *Eastenders*, *Coronation Street*, *Emmerdale Farm*, and *Brookside*). Waxer<sup>268</sup> was interested in the popular programmes broadcast in three separate countries (US, UK, and Canada).

Others<sup>229 230</sup> selected their sample based on the time of day and the genre that was broadcast. For example, Diener<sup>230</sup> was interested in soap operas broadcast on daytime television.

Further researchers, such as Cumberbatch and Gaunlett<sup>244</sup>, selected their sample based on the audience that viewed the television and they included all programmes broadcast during prime-time that were known to be popular among young people.

Further researchers included more general samples, such as Cruz *et al*<sup>237</sup>, McGee *et al*<sup>245</sup> who included all genres and programmes that were broadcast during the popular prime-time television viewing period.

Although there have been earlier studies interested in the tobacco and alcohol content of television broadcast in the UK, they have predominantly been focused on very specific samples. Cumberbatch and Gaunlett<sup>244</sup>, on behalf of Ofcom, not only restricted their sample to programmes popular among young people, but they additionally excluded any advertisements or trailers that were broadcast. Other researchers investigating UK television focused on the most popular programmes as reported in *Broadcast magazine*<sup>269 272</sup>, specific soap operas<sup>270</sup>, and in one case the UK was included as part of a wider study a three country investigation<sup>268</sup>. None of these studies included both advertisements and programming broadcast.

No previous research has specifically been interested in or reported on all television broadcasting, both programmes and advertisements, on UK television that was aired at the most popular, prime-time, period for television viewing.

Television broadcasting has been investigated for tobacco and alcohol content as far back as 1950<sup>236</sup>, and as recently as 2005 (alcohol)<sup>267</sup> and 2007

(tobacco)<sup>336</sup>. Breed and De Foe<sup>236</sup> were interested in the smoking and drinking content of situation comedies and dramas broadcast between 1950 and 1982 in the US. Russell and Russell<sup>267</sup> were interested in the alcohol messages in prime-time television series broadcast in 2004 and 2005, while MacKenzie *et al*<sup>336</sup> were interested in Australian news coverage of smoking related diseases as broadcast on news, current affairs, and health infotainment programmes in 2007.

In addition to the years covered in previous research investigating tobacco and alcohol television content, the number of weeks and the number of hours of broadcasting has also varied. Some studies covered relatively short periods of broadcasting, such as Blair *et al*<sup>240</sup>, who although covered an entire ten episodes of the television series *The Osbournes*, this covered less than four hours of broadcasting. Smith *et al*<sup>269</sup> and Pendleton *et al*<sup>272</sup> were both interested in British television, selected their samples from *Broadcast Magazine* based on programme popularity, each study covered 27 and 24 hours of broadcasting respectively.

Other studies covered far more broadcasting hours, for example Madden and Grube<sup>241</sup> covered 444 hours of television broadcasting in their investigation of tobacco and alcohol advertising in televised sporting events, and Cafiso *et al*<sup>266</sup> covered 300 hours of broadcasting in their investigation alcohol and other beverages on television. Although these researchers included much larger number of hours in their studies, they limited their samples in other ways. Madden and Grube<sup>241</sup> only included broadcast sport, excluding all other genres of programmes and advertising breaks, and Cafiso *et al*<sup>266</sup> limiting their sample to three commercial US West-Coast television stations.

### 3.1.2.2 Television coding

Coding schemes used for tobacco [see **table 3.3**] and alcohol [see **table 3.4**] content in television broadcasting have varied considerably. While several of the studies have been interested in both the tobacco and alcohol content of television broadcasting, some have been interested in either tobacco or alcohol content alone, and others have had very specific interests in the tobacco or alcohol content investigated. As there have been differences in the specific aspects of the content under investigation, there has also been considerable variation in how the content has been coded.

For example, Greenberg *et al*<sup>231</sup> were interested in tobacco, alcohol and illicit drug use contained in US television broadcasting, and for each of the substances they coded for each incidence of the consumption of, attempt to consume, and making laudatory remarks about the consumption of the substance. However they did not include any substance-related paraphernalia, or environmental references which were unrelated to actual or implied use. Sone<sup>238</sup> was interested in all tobacco related actions, including actual smoking, handling of cigarette packs or of cigarettes, purchasing cigarettes and any explicit dialogue relating to smoking or tobacco. Madden and Grube<sup>241</sup> were specifically interested in any advertising that took place within sports broadcasting, and thus they limited their coding to only include any type of tobacco or alcohol advertising, such as bill boards or on-site promotions, and excluded all other references to tobacco or alcohol.

In two studies by Hanewinkel *et al*<sup>239 246</sup> the focus of interest was smoking in German television programmes, and these researchers coded tobacco content as handling or using tobacco, and brand appearances. They excluded from their analysis any verbal references, images of vending machines, signs, billboards,

posters, packets of cigarettes, ashtrays, cigarette lighters, and any other related tobacco products including nicotine replacement therapy.

Pendleton *et al*<sup>272</sup>, interested in alcohol portrayal, coded for all verbal and visual references to alcohol and drinking scenes, but Waxer<sup>268</sup> limited his investigation to alcoholic drink consumption.

### **3.1.2.3 Television recording**

Similarly with the recording methods used in film, there have also been differences in the recording methods used by the different researchers who have investigated tobacco and alcohol content in television programmes. The one thing that the earlier studies have in common, as with investigation into film content, is that they have all used some method of time sampling measurement (TSM).

Previous researchers have measured television content with either one-minute intervals (e.g. Zwarun<sup>242</sup>, and Madden and Grube<sup>241</sup>), three-minute intervals (e.g. Kanda *et al*<sup>248</sup>), or five-minute intervals (e.g. McGee *et al*<sup>245</sup> who used five-minute intervals recording for uninterrupted interviews), scenes (e.g. Diener<sup>230</sup>), continuously (e.g. Mackenzie *et al*<sup>336</sup>), or some combination of these measurements (e.g. McGee *et al*<sup>245</sup> who in addition to using five-minute intervals used scenes for all other broadcasts except for uninterrupted broadcasts).

Zwarun<sup>242</sup> used one-minute interval recording to examine televised sporting events for tobacco and alcohol promotion, and Kanda *et al*<sup>248</sup> used three-minute intervals for investigating the smoking content of popular Japanese television drama series, McGee *et al*<sup>245</sup> used a combination of five-minute interval recording methods and scenes for investigating tobacco imagery on

television. For those programmes that contained natural scenes, the scenes were used as the recording interval, however for programmes that involved uninterrupted interviews five-minute interval recording methods were employed.

Some researchers used more than one recording methods, for example Russell and Russell<sup>267</sup> used both interval and episode recording methods as they felt that this would allow for the capturing of both specific and overall alcohol messages, including broader thematic issues, in the television broadcasting. Their specific interest was to explore the ways in which embedded messages about alcohol are communicated in television programming, and not only to categorise the occurrence of alcohol or other content within the programmes.

<b>Table 3.3:</b>							
<b>Summary of sampling and coding used in other research investigating tobacco on television</b>							
<b>Author (year) (study interest)</b>	<b>Country (study period)</b>	<b>Broadcast of interest</b>	<b>Measured</b>	<b>Time period</b>	<b>Amount</b>	<b>Recording method Years</b>	<b>Specific criteria</b>
Greenberg <i>et al</i> (1979)  (Tobacco, alcohol and illicit drugs)	US (1976-1978)	Two seasons: 1976-77 & 1977-78 one composite week from each season covering three commercial channels	composite weeks	Two seasons	120 (approx 60 hours for each season)	continuous	*tobacco – each incidence of the consumption of, attempt to consume, and making laudatory remarks about the consumption of (tobacco)  <u>Excluded</u> *variety shows, public affairs, movies, sports, and miscellaneous non-fiction
Breed & De Foe (1984)  (Drinking and smoking)	US (1950-1982)	Television entertainment programmes (dramas and situation comedies) that were set in the US from 1940 onwards	Television entertainment programmes from 11 and 13 stations from different communities and archived programmes	Situation comedies and dramas 1950-1982	not documented	scenes	*smoking in dramas and situation comedies  *cigarettes used on-screen
Cruz <i>et al</i> (1986)  (Tobacco use)	US (1984)	Prime-time TV programming in the fall, 1984	116 episodes of routine fiction programming	*2 week composite sample of prime-time TV (drawn randomly over 7 weeks)	115.5 hours	acts (events)	*smoking: prepared to smoke or smoking a cigarette, and prepared to smoke or smoking other types of tobacco  <u>Excluded</u> *Non-fiction dropped *Comedy/variety removed from final analysis
Diener (1993)  (Alcohol and tobacco use)	US (1986 and 1991)	Daytime soap operas	daytime soap operas Aug-Oct 1986, and Aug-Oct 1991	*All 8 hour long daytime soap operas that were broadcast in both 1986 and 1991. Five one-hour soap operas were recorded each year for each soap	80hours	scenes	*the presence or absence of tobacco (held/consumed/placed in a scene)  *Daytime soap opera programmes
Madden & Grube (1994)  (Alcohol & tobacco advertising)	US (1990-1992)	Televised sports events	*College and professional sporting events (football, baseball, & basketball) broadcast * and from 1991 golf, auto racing, bicycling, and Olympic coverage	Weekends before 5pm & "Monday night football"	443.7 hours	1-min intervals	*Sporting events Looking specifically for advertising seen during broadcast sporting events including stadium signs, other on-site promotions (physical or audible), brief product sponsorship (visible or audible to the television audience only)
Hazan & Glantz	US	Prime time TV (US)	* 3 TV channels	*3 composite weeks	111 hours	events	*tobacco use

(1995) (Tobacco use)	(1995)		*157 programmes *fiction				<u>Excluded</u> *sport, news magazines, other regular notification programmes
Sone (1999) (Tobacco-related scenes)	Japan (1999)	Television dramas (Japanese)	*94 episodes of 8 series of 1 hr TV dramas broadcast by 3 nationwide commercial stations	*series *2 years	94 hours	Tobacco related actions	*Tobacco related actions including cigarette smoking and handling of cigarettes or packs, and purchasing, explicit dialogue regarding smoking or tobacco  *Dramas choose were mainly targeted at young people
Christenson <i>et al</i> (On behalf of ONDCP**) (2000) (Substance use)	US (1998-1999)	Prime-time TV	186 episodes of the top rated sitcoms & dramas (186 episodes) 13 1 hr Dramas & 29 ½ hr sitcoms	Oct-Dec (2 years)	(not documented)	continuous	*Episodes – setting, substance used, whether the substance was part of the main plot, any negative consequences or criticisms of the substance use
Long <i>et al</i> (2002) (Alcohol, illicit drugs and tobacco)	US (1995-1996)	Prime-time TV seasons	All fictional programmes on 4 major US broadcast networks between 8-11pm (Mon-Sat) & 7-11pm on Sun 306 programmes	4 sample viewing weeks	245 hours	Characters only (major and minor)	*Character use, defined as using or holding the substance, if use was implied by their proximity to the substance, or if the dialogue indicated they has been using  Compared use amongst characters on TV with the general population Fictional programmes only
Cumberbatch & Gaunlett (on behalf of Ofcom) (2005) (Smoking, alcohol & drugs)	UK (2004)	Popular television	All television programmes in the top ten most watched by young people 10-15 years)	Three month period - 12 weeks, (Aug, Sept. Oct)	258 programmes	scenes	*Smoking behaviour (actual or implied), and discussion, references and visuals
Blair <i>et al</i> (2005) (Substance use – alcohol, tobacco, and other drugs)	US (2002)	The Osbournes (reality TV show)	one (first) season (2002) 10x22min episodes	series	3.66 hours	Continuous	* tobacco: substance use, the way the use was portrayed (visually or verbally), the source of the message (the character in the show involved in the incident), and the slant of the incident (endorsement or rejection)
McGee and Ketchel (2006) (Tobacco imagery)	New Zealand (2002-2004)	Prime-time television programming (NZ)	3 free to air channels & 1 music channel	one week each year for each of the three years	98 hours (2004) compared to 73.5 hours (2002)	Scenes, except for uninterrupted interviews (5 min intervals)	*tobacco imagery: the depiction of characters smoking, someone talking about tobacco, or someone being offered tobacco, to vending machines, signs, billboards, and posters, packets of cigarettes, ashtrays, cigarette lighters, and any other related tobacco product including nicotine replacement products

Kanda et al (2006)  (Smoking scenes)	Japan (2001-2002)	Japanese serial television drama's	14 first run TV drama series (targeted at under 40's)	Same season (3 months) over 2 consecutive years  evening time	136 hours & 42 minutes	3 minute intervals	Dramas that at least 1 hour long broadcast on 1 of the 5 major commercial broadcasters (a) popular slot starting at 9pm Mon, Sat or Sun & 10pm on other days, Or (b) spin off drama's of an original series registering a viewer rate in excess of 20%
Zwarun (2006)  (Alcohol & tobacco promotion)	US (2000-2002)	Televised sports events	College and professional events broadcast  events aired on 4 major TV networks & cable	Random sample of sporting events from 3 years	83.2 hours	1-minute intervals	*programmes were examined for traditional advertising (commercials), and non-traditional advertising (stadium signs, announcer, voiceovers)  *Included 3 magazine type programmes as well as actual events (e.g. "inside the NFL")
Diener (2007)  (Alcohol and tobacco cues)	US (1986, 1991, and 2001)	Daytime soap operas	Five one-hour episodes were recorded for each soap opera each year (one episode per week for each soap opera, each on a different day)	*specific soap operas *1986, 1991, and 2001)	115 hours	scenes	*tobacco cues: defined as cigarettes, cigars, pipes (either visual or verbal reference to smoking, cigarettes etc) either present in a scene or being consumed. Also branded or unbranded were coded.
Hanewinkel & Wiborg (2007)  (Smoking)	Germany (2005)	free-to-air German television programming	4 main free-to-air television channels totalling 395 programmes	1 week, 3-12pm each day	252 hours	<u>Each programme:</u> scenes  <u>Movies, TV films &amp; serials:</u> Nos. of occurrences Nov 2005	*handling or using tobacco, and any brand appearances  <u>Excluded:</u> *verbal references to tobacco, images of vending machines, signs, billboards, posters, packets of cigarettes, ashtrays cigarette lighters, and other related tobacco products including nicotine replacement therapy
Hanewinkel & Wiborg (2008)  (Smoking)	Germany (1985-2004)	German crime series over 20 years	One specific German TV crime series ("A case for two") (100 60 min episodes)	190 episodes broadcast over 20 years, 5 episodes randomly sampled from each year (52.6% of total sample)	100 hours	Scenes (occurrences counted irrespective of scene duration, or how many times appeared)	*smoking, defined as handling or using tobacco <u>Excluded:</u> *verbal references to tobacco, images of vending machines, signs, billboards, posters, packets of cigarettes, ashtrays, cigarette lighters, and other related tobacco products including nicotine replacement therapy
MacKenzie et al (2009) (Smoking-related disease)	Australia (2007)	Australian television news	all relevant broadcasts on Sydney's five free-to-air TV channels between 2 <sup>nd</sup> May and 31 <sup>st</sup> Dec	broadcasts of news, current affairs, health infotainment programmes	not disclosed	continuous	any mention of any smoking related diseases
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<b>Author (interest)</b>	<b>Country (Year)</b>	<b>Broadcast of interest</b>	<b>Measured</b>	<b>Time period</b>	<b>Amount</b>	<b>Recording method</b>	<b>Specific criteria</b>
Greenberg <i>et al</i> (1979)  (Tobacco, alcohol and illicit drugs)	US 1976-1978	Two seasons: 1976-77 & 1977-78 one composite week from each season covering three commercial channels	composite weeks	Two seasons 1976, and 1978	120 (approx 60 hours for each season)	continuous	*tobacco – each incidence of the consumption of, attempt to consume, and making laudatory remarks about the consumption of (tobacco)  <u>Excluded</u> variety shows, public affairs, movies, sports, and miscellaneous non-fiction
Cafiso <i>et al</i> (1982)  (Alcohol and other beverages)	US (not shown)	programmes and advertisements on three US West-coast television stations	all television hours in one week	broadcasts over several weeks to represent a single week for each station	294hours (588 half-hour periods)	one-minute intervals	*alcoholic and non-alcoholic beverages *events: type of beverage, type of event (verbal, drinking scene, background of scene), location (home, bar, other), reason for drinking (relief, celebration, other)
Breed & Defoe (1984)  (Drinking and smoking)	US (1950-1982)	Television entertainment programmes (dramas and situation comedies) that were set in the US from 1940 onwards	Television entertainment programmes from 11 and 13 stations from different communities & archived programmes	Situation comedies and dramas broadcast 1950-1982	not documented	scenes	*alcohol in dramas and situation comedies *drinking by a character on-screen *A character ordering, accepting, pouring, or holding a drink *any and all activities of alcohol activity
Smith <i>et al</i> (1988)  (alcohol portrayal)	UK (1986)	British television	most popular programmes from the top 100 published in Broadcast magazine	50 programmes broadcast, over 5 months	26 hours 54 minutes	Scenes (continuous)	*Investigates the extent and nature of drinking alcohol on British TV *Both fiction and non-fiction, but excluded feature films & other one-off programmes
Pendleton <i>et al</i> (1991)  (Alcohol portrayal)	UK (1988)	British television	most popular programmes from Broadcast magazine	50 programmes	24hours 23mins	continuous	*Verbal and visual references to alcohol and drinking scenes (actual or implied)
Waxer (1992)  (Alcohol consumption)	UK, US, Canada (not provided)	Prime-time broadcasting	20 hours each of the three countries	20 hours of broadcasting for each of the three countries	60 hours	continuous	*alcoholic drink consumption

Diener (1993)  (alcohol and tobacco use)	US (1986 and 1991)	Daytime soap operas	daytime soap operas Aug-Oct 1986, and Aug-Oct 1991	*broadcast in both 1986 and 1991 – five one-hour soap operas were recorded each year for each soap	80hours	scenes	*the presence or absence of alcohol (held/consumed/placed in a scene)
Madden & Grube (1994)  (Alcohol & tobacco advertising)	US (1990-1992)	Televised sports events	*College and professional sporting events (football, baseball, & basketball) broadcast* and from 1991 golf, auto racing, bicycling, and Olympic coverage	Weekends before 5pm & "Monday night football"	443.7 hours	1-min intervals	*Looking specifically for advertising seen during broadcast sporting events including stadium signs, other on-site promotions (physical or audible), brief product sponsorship (visible or audible to the television audience only)
Furnham <i>et al</i> (1997)  (Alcohol portrayal)	UK (1994-1995)	British TV soap operas (Neighbours, Home and Away, Eastenders, Coronation Street, Emmerdale farm & Brookside)	*5 episodes of each of the 6 soaps (top viewing figures) *between 17.35-20.30	*5 episodes of each 6 soaps (Dec-Jan) *25 episodes in total	15 hours	Scenes (but also duration of any drinking acts was measured) 1994 & 1995	*Alcoholic and non-alcoholic drinks *visual and verbal references to alcohol *duration of drinking scene (actual or implied)
ONDCP** (2000)  (substance use)	US (1998-1999)	Prime-time TV	186 episodes of the top rated sitcoms & dramas *186 episodes 13 1 hr Dramas & 29 ½ hr sitcoms	Oct-Dec (2 years)	25.5hours	continuous	*Episodes – setting, substance used, whether the substance was part of the main plot, any negative consequences or criticisms of the substance use
Long <i>et al</i> (2002) (Alcohol, illicit drugs and tobacco)	US (1995-1996)	Prime-time TV seasons	All fictional programmes on 4 major US broadcast networks between 8-11pm (Mon-Sat) & 7-11pm on Sun 306 programmes	4 sample viewing weeks	245 hours	Characters only (major and minor)	*Character use, defined as using or holding the substance, if use was implied by their proximity to the substance, or if the dialogue indicated they has been using Compared use amongst characters on TV with the general population Fictional programmes only
Cumberbatch & Gaunlett (on behalf of Ofcom) (2005)  (Smoking, alcohol and drugs)	UK (2004)	Popular television	All television programmes in the top ten most watched by young people 10-15 years)	Three month period - 12 weeks, (Aug, Sept. Oct)	258 programmes	scenes	*Alcohol behaviour (actual or implied), and discussion, references and visuals
Blair <i>et al</i> (2005)	US (2002)	The Osbournes	one (first) season (2002)	series	3.66 hours	Continuous	* Alcohol: substance use, the way the use was portrayed (visually or verbally), the source of the message (the

(substance use – alcohol, tobacco, and other drugs)		(reality TV show)	10x22min episodes				character in the show involved in the incident), and the slant of the incident (endorsement or rejection)
Zwarun (2006)  (Alcohol & tobacco promotion)	US (2000-2002)	Televised sports events	College and professional events broadcast *events aired on 4 major TV networks & cable	Random sample of sporting events from 3 years	83.2 hours	1-minute intervals	*programmes were examined for traditional advertising (commercials), and non-traditional advertising (stadium signs, announcer, voiceovers)  *Included 3 magazine type programmes as well as actual events (e.g. "inside the NFL")
Diener (2007)  (Alcohol and tobacco cues)	US (1986, 1991, & 2001)	Daytime soap operas	Five one-hour episodes were recorded for each soap opera each year (one episode per week for each soap opera, each on a different day)	*specific soap operas *1986, 1991, and 2001	115 hours	scenes	*Alcohol cues: defined as hard liquor, liqueurs, champagne, wine and beer (either visual or verbal reference to smoking, cigarettes etc) either present in a scene or being consumed. Also branded or unbranded were coded.
McGee et al (2007)  (Alcohol imagery)	New Zealand (2004)	programmes and advertisements	prime-time free-to-air television	seven consecutive days 6-9.30pm	98hours	scenes (5-min intervals for documentaries and news)	*alcohol imagery including number of people intoxicated, drinking alcohol, talking about alcohol, serving alcohol, and main type of alcohol featured
van Hoof et al (2009)  (Alcohol portrayals)	Netherlands (2004)	A Dutch Soap series	A random sample of episodes broadcast over two months	40 episodes	Approx. 15 hours (40x22mins)	episodes (continuous)	*alcohol consumption-amount of alcohol, types of alcohol, time of day, and drinking situation
Fielder et al (2009)  (Alcohol advertising)	Australia (2005-2006)	Alcohol advertisements broadcast on Australian metropolitan free-to-air television	Most viewed adverts by	30 advertisements	not provided	continuous	*Elements appealing to children and underage youth in televised alcohol advertisements (eg Humour, music, story, people, characters)
Russell et al (2009)  (Alcohol messages)	US (not given)	The US drama <i>The O.C.</i>	Three seasons	76 episodes	Approx. 53 hours (76x42mins)	continuous	*Alcohol depictions, defined as those clearly showing containers (eg cans), depictions containing glasses generally associated with alcohol (eg martini glass), and alcohol signage within the programme (eg Billboards)
Russell & Russell (2009)  (Alcohol messages)	US (2004-2005)	prime-time television series	eight week sample	144 prime-time programmes	Approx 270 hours	interval and episode	*Alcohol depictions, defined as those clearly showing containers (eg cans), depictions containing glasses generally associated with alcohol (eg martini glass), and alcohol signage within the programme (eg Billboards)
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### **3.1.3 Methods used in other media**

Tobacco and alcohol content in media other than film or television has been studied using similar methods. Other forms of media where similar methods of descriptive content analysis have been used to investigate the occurrences of tobacco, alcohol, or other substances and behaviours in have been music videos. DuRant *et al*<sup>350 351</sup>, have investigated tobacco, alcohol<sup>350</sup>, and violence and weapon carrying<sup>351</sup> in music videos, Roberts *et al*<sup>352</sup> have investigated substance use, including illicit drugs, alcohol and tobacco, in music videos, whilst Herd<sup>353</sup> was interested in changes to alcohol use in Rap song lyrics between 1979 and 1997.

Additionally, Freeman and Chapman<sup>354</sup> have studied the tobacco content of YouTube videos, whilst Austin and Hust<sup>355</sup> have investigated alcohol and non-alcohol advertisements in popular magazines. There has also been studies looking at the content of social media such as Facebook e.g. Freeman and Chapman<sup>356</sup> looked at British American Tobacco's presence and promotion of tobacco on Facebook.

## **3.2 Method - film**

### **3.2.1 Sampling of films**

As noted earlier, many of the previous studies looking at tobacco and alcohol content in films selected their sample based on the most popular films released within the geographical region of interest. As we were specifically interested in films viewed by United Kingdom (UK) audiences, those films most popularly viewed by UK audiences in the UK were selected for inclusion. This would ensure

that the films investigated would represent those that the greatest number of people in the UK would have seen.

Similarly to other studies, we used the cinema box office figures to identify the most popularly viewed films. Therefore in order to identify the most popularly viewed films within the UK a list of the 50 most commercially successful films, based on the films earnings at UK cinema box offices in the year the film was released, within the UK's Cinema Box Office (UKCBO) was sought directly from the Research and Statistics Unit at the UK Film Council (UKFC)<sup>357</sup>. The UKFC, although independent, were at the time this research started the government-backed lead agency for film in the UK, whose function was to ensure that the economic, cultural and educational aspects of film were effectively represented at home and abroad<sup>357</sup>. In July 2010, the Government announced that the UKFC would be abolished and that its previous functions would be passed to other departments and agencies<sup>358</sup>. The purpose of their Research and Statistics Unit had been to provide research data and market intelligence to anyone with an interest in UK Film and culture. As well as providing this function, the UKFC carried out its own research to improve the UKFC's understanding of the economic and social context of film production, distribution, exhibition and ancillary markets. For this reason this source of film data was considered to be independently unbiased.

A Research Executive from the UKFC, (Sean Perkins), kindly compiled and forwarded a list of the top 50 commercially successful films within the UKCBO for each year from 1989 and 2008, totalling 1,000 films. Included in the information list received were the figures for each film's UK cinema's box office gross takings, the UK film release date, and the distributor of the film in the UK.

Data specific to the UKCBO were crucially important for the study, as the objectives of this research specifically, and exclusively, relates to films as they are viewed in the UK market as opposed to other countries or regions of the world. From an initial read-through of the list of films it was obvious that the major distinction between this list of the 50 most commercially successful films within the UKCBO and those other lists that would be compiled for other (predominantly US) Cinema Box Offices was that this list included many UK films that were popular predominantly in the UK only – for example. *Mr Bean's Holiday*<sup>359</sup> which reached number 12 in the 2007 UKBO but only number 79 in the US Box Office in the same year. Similarly, *Hot Fuzz*<sup>360</sup> reached number 13 in the UK in 2007, but only 102 in the US Box Office<sup>361</sup>).

Films were included from 1989 onwards until the year in which the research work began (2008). Box office data exclusive to the UK were not measured before 1989, and therefore unlike studies in other regions of the world, this study included all years from the start of the regions box office. Additionally, films from earlier years were increasingly unlikely to be seen by young people today.

The majority of the previous studies looked at had selected their films randomly from those most popular at the box office (e.g. Hazan *et al*<sup>207</sup> randomly selected 2 films from the top 20 films at the US cinema box office each year from 1960 until 1990). As we were most interested in films that were the most popularly viewed by British audiences, we decided to select our film sample based on popularity, defined here as success, based on earnings, as the UKCBO as opposed to random selection, as this would represent the films' most viewed at the UKCBO each year.

Inspection of the list of top 50 films each year clearly revealed that the bulk of the market share was taken by the top few films. As an example, the top 50 films shown at the UKCBO for 1997 are shown in **table 3.5** below, which shows that the film that made the most at the UK box office was *The Full Monty* (1997, 15)<sup>362</sup>, taking a total of £52,232,058, while the 15<sup>th</sup> film on the list, *Jerry McGuire* (1997, 15)<sup>363</sup>, took less than £10m, and the 50<sup>th</sup> and last film on the list *Fly Away Home* (1997, Universal)<sup>364</sup>, took a mere £2,348,181 in comparison, more than 20 times less than the earnings taken from the top film in 1997.

<b>1.</b>	<b>THE FULL MONTY</b>	<b>52,232,058</b>
<b>2.</b>	MEN IN BLACK	35,820,921
<b>3.</b>	THE LOST WORLD: JURASSIC PARK	25,799,961
<b>4.</b>	TOMORROW NEVER DIES	19,884,412
<b>5.</b>	BEAN	17,972,562
<b>6.</b>	STAR WARS (RE:97)	16,358,034
<b>7.</b>	BATMAN & ROBIN	14,910,243
<b>8.</b>	RANSOM	12,870,629
<b>9.</b>	THE ENGLISH PATIENT	12,809,287
<b>10.</b>	LIAR LIAR	11,785,973
<b>11.</b>	SPACE JAM	11,747,511
<b>12.</b>	HERCULES	11,577,779
<b>13.</b>	SPICEWORLD THE MOVIE	11,401,855
<b>14.</b>	SLEEPERS	10,171,787
<b>15.</b>	<b>JERRY MAGUIRE</b>	<b>9,429,212</b>
<b>16.</b>	MY BEST FRIEND'S WEDDING	8,774,890
<b>17.</b>	SCREAM	8,352,705
<b>18.</b>	THE BORROWERS	8,003,575
<b>19.</b>	GEORGE OF THE JUNGLE	7,588,723
<b>20.</b>	ROMEO & JULIET	7,438,055
<b>21.</b>	L.A. CONFIDENTIAL	7,413,478
<b>22.</b>	ALIEN RESURRECTION	7,354,378
<b>23.</b>	EMPIRE STRIKES BACK (RE:97)	7,184,910
<b>24.</b>	MARS ATTACKS!	7,139,304
<b>25.</b>	THE FIFTH ELEMENT	7,089,335
<b>26.</b>	ONE FINE DAY	6,583,221
<b>27.</b>	FACE/OFF	6,257,684
<b>28.</b>	AIR FORCE ONE	6,113,308
<b>29.</b>	CON AIR	5,883,529
<b>30.</b>	RETURN OF THE JEDI (RE:97)	5,383,481
<b>31.</b>	AUSTIN POWERS	4,458,690
<b>32.</b>	I KNOW WHAT YOU DID...	4,420,952
<b>33.</b>	SHINE	4,415,599
<b>34.</b>	FIERCE CREATURES	4,310,638
<b>35.</b>	MRS. BROWN	4,119,127
<b>36.</b>	DANTE'S PEAK	4,071,627
<b>37.</b>	DONNIE BRASCO	4,062,252
<b>38.</b>	SHOOTING FISH	4,023,825
<b>39.</b>	THE PEACEMAKER	3,687,946
<b>40.</b>	EVENT HORIZON	3,610,304
<b>41.</b>	SPEED 2	3,604,625
<b>42.</b>	A LIFE LESS ORDINARY	3,517,683
<b>43.</b>	CONTACT	3,361,031
<b>44.</b>	CONSPIRACY THEORY	3,298,584
<b>45.</b>	VOLCANO	3,158,360
<b>46.</b>	HOME ALONE 3	2,950,698
<b>47.</b>	THE DEVIL'S OWN	2,659,114
<b>48.</b>	BEAVIS & BUTT-HEAD DO AMERICA	2,518,429
<b>49.</b>	THE SAINT	2,463,845
<b>50.</b>	<b>FLY AWAY HOME</b>	<b>2,348,181</b>

From the list of the 50 top commercially successful films from the UKCBO each year from 1989 through to 2008 it was decided to select the top 15 commercially successful films each year, since the top 15 typically included approximately fifty percent of the market share of the top 50 films in each year

sampled (based on the information that has been available) (see **table 3.6** below). This approach provided a balance between representativeness in each year, time period covered, and logistic feasibility. For a full list of all the 300 films included in this research project, see **appendix 1**. This is the only study that has covered such a large share of films at the cinema box office, and thus is more representative of the most seen films by the greatest number of cinema audience members.

<b>Table 3.6:</b>						
<b>Percentage of each year's market viewed<sup>361</sup></b>						
<b>YEAR</b>	<b>SCREEN NOS.</b>	<b>FILMS</b>	<b>TOTAL ADMISSIONS</b>	<b>TOTAL BOX OFFICE GROSS (£)</b>	<b>TOP 15 GROSS BOX OFFICE (£)</b>	<b>PROPORTION OF TOTAL BOX OFFICE GROSS</b>
1989	N/A	N/A	N/A	N/A	124444627	N/A
1990	N/A	N/A	N/A	N/A	130922128	N/A
1991	N/A	N/A	N/A	279766628	150869971	53.92708%
1992	N/A	259	N/A	296198647	157729815	53.25136%
1993	N/A	289	N/A	349787821	177272854	50.68011%
1994	1919	290	128.6m	383401765	217971542	56.85199%
1995	2003	277	123.5m	383588370	185677352	48.40537%
1996	2166	286	133.2m	441341636	240081337	54.39807%
1997	2383	299	150.1m	526513879	274772224	52.18708%
1998	2638	342	147.2m	546832939	254853753	46.60541%
1999	2825	409	151.3m	606076502	327287149	54.00096%
2000	3017	403	157.1m	627540801	291314031	46.42153%
2001	3248	370	171.8m	710600647	396317850	55.77223%
2002	3402	396	189.4m	812219608	433076980	53.32018%
2003	3579	439	183.4m	809478374	380243488	46.97389%
2004	3624	463	186.3m	853755672	355194106	41.60372%
2005	3867	476	180.0m	840352231	406011963	48.3145%
2006	3976	519	174.4m	840166798	353150399	42.03337%
2007	4016	525	180.7m	904811490	414162101	45.7733%
2008	4117	531	182.4m	949407092	412826640	43.48257%
<b>Total box office gross</b>			Range: 279766628-949407092; Mean: 620102272.2; Median: 616808651.5			
<b>Proportion of total box office gross</b>			Range: 41.60%-56.85%; Mean: 49.67%; Median: 49.54%			

### **3.2.2 Coding of films**

Before watching any of the films a detailed coding guide was developed to ensure that the appropriate information would be identified and collected from the films viewed, and also to ensure that exactly the same information would be sought from each of the films that would be individually viewed and coded. The coding guide used was developed based on the aims and objectives of the research as well as previous research in the areas of tobacco and alcohol content in films<sup>75 179 195 207-215 218-222 224-227 251 255-257</sup>.

#### **3.2.2.1 Background information**

As in many of the other studies where background information on the films was collected (e.g. Hazan *et al*<sup>207</sup> who collected information on the title, year of release, age rating, genre, target audience and historical era, and Dalton *et al*<sup>208</sup> who also recorded age rating, genre, but also recorded each film's total run time, and information on their production companies), we also collated similar information.

The background information collected for each of film included; *Title, UK Cinema box office (UKCBO) earnings, year of release, run time, genre, age rating of film* (as rated by the British Board of Film Classification (BBFC)<sup>365</sup>), and *country of origin*. This information was obtained from the film DVD boxes, the film credits, the IMDb (Internet Movie Database)<sup>366</sup>, and the UKFC<sup>367</sup>.

The title was the title used in the UK (occasionally films were released with different titles in different countries), the UK cinema box office earnings were the figures provided by the UKFC and refers to the earnings the film made whilst at the UKCBO, the year the film was released was the year the film was

released at the UKCBO, and the films run time was the run time in the UK (sometimes, different edited versions of films were released in different countries or geographical regions).

The IMDb was first set up during the early 1990's by movie fans for movie fans and now holds a large collection of movie information, and is currently used by both movie fans and industry professionals. On their website it is claimed that their movie database comes from a variety of different sources and goes through a large number of consistency checks to ensure its accuracy and reliability. Earlier researchers had also used this resource as a source of film information, such as Dalton *et al*<sup>208</sup>, and Thompson and Yokota<sup>219</sup>. Each film's genre was determined from the IMDb categories<sup>366</sup>. Where more than one category was listed, the most appropriate genre was determined by the researcher's discretion. The genre's that films were categorised as were *Musical, Biography, Crime, Animation, Adventure, Thriller, Science-Fiction/Fantasy/Horror, Comedy, Drama, and Action*.

The BBFC is the independent, non-government body funded through fees from films submitted, which classifies films into age categories based on each film's suitability for viewing by the audience (See **Box 1**) on behalf of local authorities, who licence cinemas under the Licensing Act 2003<sup>170</sup>.

<b>Box 1: BBFC Age rated restriction categories for films viewed in UK cinema:</b>	
<b>Universal (U)</b>	Suitable for all audiences
<b>Parent Guidance (PG)</b>	General viewing, but some scenes may be unsuitable for young children
<b>12/12A*</b>	(12) Suitable for 12 years and older (12A) under 12's must be accompanied by an adult
<b>15</b>	Suitable for 15 years and over
<b>18</b>	Suitable for 18 years and older
*12 and 12A rated films have been amalgamated as the 12A film rating replaced the 12 rating for cinema film viewing in 2002.	

A film's country of origin was determined by the IMDb, and often several countries were cited as collaborators in the production of a single film. These were categorised as *UK only*, *US only*, *UK and US only collaboration*, *UK and other collaborators (not including US)*, *US and other collaborators (not including UK)*, *UK and US and other collaborators*, and originating from *countries other than UK or US*.

### **3.2.2.2 Tobacco episodes**

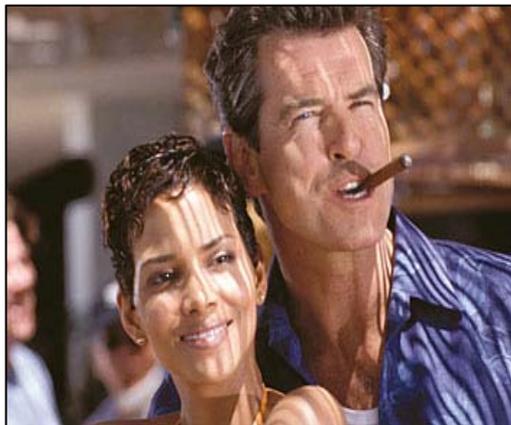
A coding scheme for tobacco imagery and tobacco brand appearances in the films was developed, based where appropriate on existing research in the area<sup>75</sup> 195 207-215 218 219 221 222 224-227 257. Several main things were coded for including *tobacco use*, *tobacco paraphernalia*, *inferred tobacco use*, and *tobacco brand appearances*.

*Tobacco use* was defined by the presence of tobacco actually being consumed on-screen by any character, and was coded as being either *cigarette*, *pipe*, *cigar* or *other* e.g. chewing tobacco/water pipe. *Tobacco paraphernalia* was defined by the presence of apparatus related to tobacco use and smoking and was coded as being *cigarette or tobacco packet*, *matches*, *lighter*, *ashtray* or *other*. *Inferred tobacco use* was defined as the presence of any other suggestion of tobacco use and was coded as being either *verbal inference* (e.g. comment), *non-verbal inference* (e.g. leaving scene with packet of cigarettes and lighter or smoky atmosphere) or *other inferred use* (e.g. written comment). Finally, *tobacco brand appearances* were defined by the presence of tobacco branding whether actually used in the scene or visible in the background, including all advertisements, logos and other promotion in which branding was clear, and unambiguous. As noted earlier, there have been various definitions used in earlier research that looked at tobacco content in films. See **figure 3.1** for visual examples of how episodes tobacco imagery appearances were coded in films. In comparison to the coded categories used in previous studies, and described earlier (see **table 3.1**), the type, and number of separate categories coded for are far more encompassing than those used in earlier studies where researchers tended to focus on very specific, and fewer coded categories.

Figure 3.1:

Examples of tobacco episodes coded (*tobacco use, tobacco paraphernalia, inferred tobacco use, and tobacco brand appearances*)

**Tobacco use:** James Bond (Pierce Brosnan) smoking a cigar in *The World is Not Enough*



**Tobacco paraphernalia:** Ashtray on the floor in *Bridget Jones's Diary* in front of Bridget Jones (Renee Zellweger)



**Inferred tobacco use:** Scene from *Mr and Mrs Smith*, man holds a cigar but never smokes it on-screen



**Tobacco brand appearances:** Scene from *Men in black* showing Marlboro branding



### 3.2.2.3 Alcohol episodes

In addition to coding the films for episodes of tobacco, episodes of alcohol were also coded, in a similar manner to that of tobacco episodes. The alcohol coding scheme was based on previous research in the area<sup>179 209 210 218-220 225 251 255-257</sup> and included coding for *actual alcohol use* and was defined as the consumption of an alcoholic drink on-screen by any character, and was coded by the type of

drink that was consumed, *beer, wine or champagne, spirits or liqueurs, cocktails, mixture of drink types* (such as in a group or crowd scene), or *type unknown*.

*Implied alcohol use*, defined as the *visible appearance*, but not actual consumption of an alcoholic drink, *a verbal reference* to alcohol use such as ordering a drink, *behaviour* such as drunkenness, or *any other appearance suggesting alcohol consumption*. *Other alcohol references* were also coded for, and these were defined as the presence of alcohol products (such as beer pumps, or bottles, or cans) without actual or implied consumption, or a verbal comment or discussion that was unrelated to actual current use. Also, *brand appearances* were also coded for, and were defined as the presence of clear and unambiguous alcohol branding, whether on a product consumed in an episode, or otherwise visible in a scene, or clearly stated in a scene (such as ordering a specific brand of alcoholic drink, or in an advertisement, sponsorship, logo's, merchandise or other recognisable branded material. For some visual examples of how alcohol imagery was coded see **figure 3.2**.

As with tobacco episodes, the alcohol coding used here, in comparison to the coded categories used in previous studies that were described earlier (see **table 3.2**), the type, and number of separate categories coded for are far more encompassing than those used in earlier studies where researchers tended to focus on very specific, and fewer coded categories.

Figure 3.2:

Examples of alcohol episodes coded (*actual alcohol use, implied alcohol use, other alcohol reference, and alcohol brand appearances*)

**Actual alcohol use:** Jules Winnfield (Samuel L. Jackson) drinks from a bottle of beer in *Pulp Fiction*



**Implied alcohol use:** Mark Darcy (Colin Firth) in *Bridget Jones's Diary* holding a glass of red wine



**Other alcohol reference:** Various bottles visible behind the bar that *Brian Flanagan* (Tom Cruise) is standing behind (products not used in the scene), in *Cocktail*



**Alcohol brand appearances:** Budweiser neon sign in the background behind the Terminator (Arnold Schwarzenegger) in *Terminator 3: Rise of the machines*



### 3.2.3 Data collection

The 300 films identified for study were obtained from film rental providers, or where they were unavailable for rental they were purchased, in Digital Video Disc (DVD) format, and viewed in order of availability. The films were coded in five-minute intervals, meaning that tobacco and alcohol episodes were coded for their presence or absence in each five-minute period of film. Where one episode occurred during a five-minute period, this was recorded as one episode, where

more than one episode occurred during a five-minute period of film<sup>ii</sup>, again, this was recorded as one episode, but where one episode occurred over a transition from one five-minute interval to the next, this was recorded as two separate episodes. If more than one episode occurred and they were not identical (e.g. actual alcohol use and inferred alcohol use) then they were coded separately.

Thus, episodes were recorded by their presence, or absence, in each five-minute interval period of film viewed. The exception to this was where brands appeared, as where multiple brand episodes occurred in the same five-minute interval, the total number and identities of the brands involved were recorded in addition to recording the presence or absence within each five-minute interval.

Interval recording was selected, not only as it has been used previously in film analysis<sup>207 209 211 215 224</sup> but also, because it has been found to be an appropriate measure for detecting relative changes in levels of behaviour<sup>348</sup>. A number of researchers<sup>207 209 215 224</sup> have previously used interval recording<sup>348 349</sup> in the same manner as used here (detecting the presence or absence of events within each five minutes of films viewed), while another<sup>211</sup>, although viewed the data in five-minute intervals, additionally counted scene changes as separate incidents. Other researchers have used different variations or different measurements, such as Dalton *et al*<sup>208</sup>, Worth *et al*<sup>222</sup>, and Hanewinkel *et al*<sup>74</sup> who measured by scene; and others<sup>221 226 227</sup> used methods of continuous measurement. The method used here is far less time consuming than continuous measures, allowing a greater number of films to be sampled in the time frame of the project, whilst is also more objective than measuring scenes, which can not only vary within films but also between films, and such variations can limit the detection of trends.

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<sup>ii</sup> As not all film lengths are divisible by five, the nearest whole number divisible by five was used.

Due to the time sampling nature of this method there are limitations. Dalton *et al*<sup>208</sup> have highlighted one, and have criticised five-minute interval recording methods because they do not allow for any correspondence between scenes or meaningful blocks of time to occur, which in turn minimises the ability of the researcher to code contextual factors effectively. However, as the purpose of this research has been primarily to describe the frequency of episodes and appearances in films and not to investigate the specific contextual details of each episode within the narrative of the film, this limitation was considered to not be withstanding here.

Another potential limitation of this method is that the absolute duration of the observed behaviour cannot be established<sup>348 368</sup>, although has been found to accurately record the frequency of behaviour, or event occurrence<sup>368</sup>. Again however, as the frequency of episodes and appearances were the characteristics of interest here and not the duration of the behaviours, it was not considered problematic to the objectives of this study.

Additionally, as this is a method of time sampling there is the potential to either underestimate or overestimate the frequency of behaviour depending on the length of the intervals sampled; if intervals are too short then the behaviour could be overestimated, and if intervals are too long then they would underestimate the behaviour frequency. Due to the relative infrequency of the behaviours of interest in this study (in terms of the absolute number of five minute intervals), it would be unlikely that this study would overestimate or underestimate their frequency. Nonetheless, it should be noted that the potential does exist that episodes could have been either under or over reported.

### **3.2.4 Analysis**

Data were entered into a database in Microsoft Office Excel<sup>369</sup> and analysed using both Excel and STATA 10<sup>370</sup>. The total number of film hours was calculated by summing the length of all the films and the mean, standard deviation (SD), and range of lengths obtained using summary statistics in STATA. Tobacco use, tobacco paraphernalia, inferred tobacco use, tobacco brand appearances, alcohol use, implied alcohol use, other alcohol reference, and alcohol brand appearances were expressed as occurrences (within five-minute intervals) per hour. In order to account for differences in film lengths, the mean rate of use in films for each year was calculated by obtaining the sum of the episodes in each film divided by the length of the film (in hours) and dividing by the total number of films each year.

To determine which form of tobacco use, tobacco paraphernalia and inferred tobacco use, as well as alcohol use, implied alcohol use, and other alcohol references were the most commonly used within the films, the number of episodes by type of tobacco consumed (cigarette, pipe, cigar or other tobacco), type of paraphernalia present (cigarette/tobacco packet, matches, lighter, ashtray and other), and type of inferred tobacco use evident (verbal, non-verbal and other), type of alcohol use (beer, wine or champagne, spirits or liqueurs, cocktails, mixture of drink types (such as in a group or crowd scene), type of implied alcohol use (visible appearance, verbal reference, behaviour, or any other appearance implying use), type of other alcohol references (presence of alcohol products such as beer pumps, or bottles, or cans, without actual or implied consumption, or a verbal comment or discussion that was unrelated to actual current use) were determined using summary commands in STATA. This was the same approach used to estimate tobacco and alcohol episodes by BBFC age classification category and country of origin.

Of the films that were found to contain any tobacco use episodes (n=176), or actual alcohol use (n=215), the distribution of which BBFC category of age restriction the films belonged to was identified using frequency commands in STATA.

Tobacco and alcohol brand appearance rates were compared between films originating in the UK and those originating in the US. Where films originated from both the UK and US (as in collaborative works), for the purpose of this comparison, these films were considered twice. To take into consideration differences in the proportions of films in the dataset by country of origin, a comparison of ratios of films (from UK and US) containing either tobacco or alcohol branding were compared. Then the different proportions of films by BBFC category, and country of origin, were determined to ascertain which category of films brand appearances most often occurred. The films containing branding and the actual brands that appeared were then examined to determine which brands appeared most frequently (in absolute terms of frequency of five-minute intervals), which films the most brands appeared in, and which brands appeared in the most films.

### **3.3 Method – television**

#### ***3.3.1 Sampling of television programming***

As can be seen from the overview of previous research carried out in this area, earlier studies predominantly selected programmes for inclusion based on their genre (e.g. Kanda *et al*<sup>248</sup> were interested in television drama serials, or Blair *et al*<sup>240</sup> were interested in the reality TV series *The Osbournes*), the geographical region programmes were aired, and/or the time of broadcast (e.g. McGee *et al*<sup>245</sup>

investigated free-to air New Zealand prime-time television programmes), or the country the programme originated from in conjunction with the genre (e.g. Furnham *et al*<sup>270</sup> who content analysed British television soap operas). The various sampling methods used reflected the differences in the different studies aims and objectives. Additionally, some of the studies are likely to be outdated, and unlikely to accurately reflect current television content due to their age (e.g. Greenberg *et al*<sup>231</sup>(1979), and Breed and Defoe<sup>236</sup> (1984)).

Similar to some of these earlier studies, we selected channels that were widely available to the majority of households. As we were specifically interested in British television that was popularly viewed, we selected those channels that were broadcast in the UK on channels available on free-to-air terrestrial television. According to BARB (Broadcasters' Audience Research Board), approximately 27 million households in the UK have access to free-to-air terrestrial television at their home<sup>234 371</sup>. BARB<sup>372</sup> was set up in the early 1980's with the aim of providing industry standard television audience measurement service for broadcasters and the advertising industry. BARB is a not for profit company funded through the fees charged for its service, and is owned by BBC, ITV, Channel4, Channel5, BSkyB and the IPA (Institute of Practitioners in Advertising).

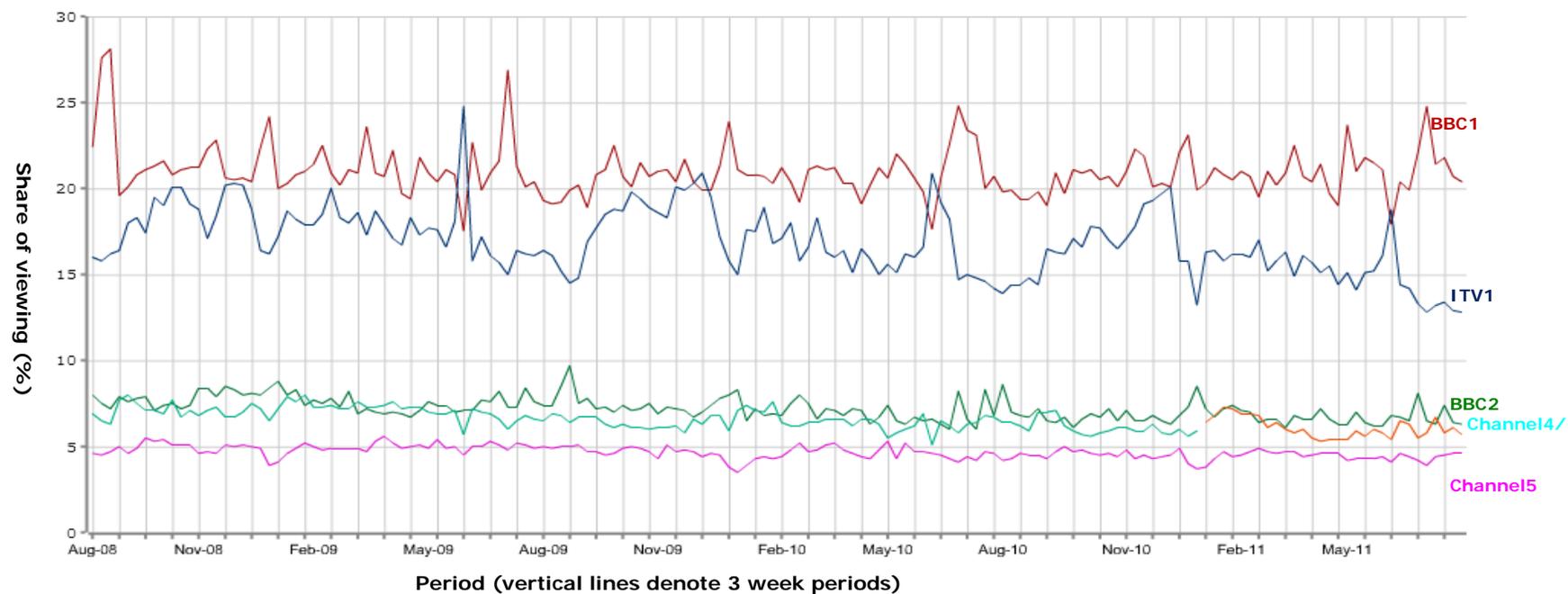
The five main terrestrial channels were selected as these five channels (*BBC1*, *BBC2*, *ITV1*, *Channel4*, and *Channel5*), according to BARB, consistently dominate television viewing in the UK (see **figure 3.3**). These five main channels in the UK are available without a cable or satellite connection or subscription. Both the *BBC* channels are public service television stations (without any commercial advertisements), and *ITV*, *Channel4*, and *Channel5* are all commercial broadcast stations (where commercial advertising is permitted).

Unlike some of the earlier studies, we did not select any particular series such as Blair *et al*<sup>240</sup> who looked at *The Osbournes*, or Hanewinkel *et al*<sup>239</sup> who content coded *A case for two*. Neither did we select one specific genre such as Diener<sup>229</sup> who looked at alcohol and tobacco cues in daytime soap operas, or Kanda *et al*<sup>248</sup> who looked at smoking in popular Japanese television series. We included all programmes and all genres as we were interested in prime-time television in general and not in specific series, or genres. Additionally it was decided not to exclude any of the advertising or programme trailers from our research as we aimed to get an overview of all broadcasting and not specifically either programmes or advertisements or programme trailers.

Therefore, genres and advertising or trailers were included that were broadcast on the five channels during peak-viewing time each day over seven days were included. One week each month for three months (April, May, and June) was selected as this would allow a sample over a three month period, allowing for variation in programmes broadcast.

Figure 3.3:

Channel Viewing Share August 2008-July 2011 (adapted from BARB<sup>371</sup>)



All other channels broadcast on UK television made up increasingly smaller proportions of viewership

As we were most interested in the television broadcasts that were seen by the largest audiences, we included only those that were broadcast during the peak-time viewing period. In UK this is typically considered to be between 6pm and 10pm (see **table 3.7** for television recorded). This also allowed us to record both before and after 9pm, which according to Ofcom (the UK Communications regulator)<sup>373</sup> is generally considered to be the watershed for adult television programmes in the UK. Ofcom<sup>99</sup> regulates the television and radio sectors, fixed line telecoms and mobiles, and the airwaves over which wireless devices operate, and operate under operates under the Communications Act 2003<sup>99 100</sup>. With regards to their regulation of television Ofcoms main legal duties are to ensure<sup>317</sup>; a wide range of high-quality television programmes are provided, that appeal to a range of tastes and interests; television, services are provided by a range of different organisations; people who watch television are protected from harmful or offensive material; and, people are protected from being treated unfairly in television, and from having their privacy invaded. They are not responsible for the content of television advertising<sup>317</sup>.

Therefore recording between 6 pm and 10 pm each day accounted for three hours before and one hour after the watershed. Before 9 pm, and after 5.30 am, programmes broadcast must not contain materials unsuitable for children which is defined by Ofcom as below the age of 15 years<sup>373</sup>.

<b>Table 3.7: Recorded television broadcasting</b>			
<b>Channels</b>	<b>Days and times</b>	<b>Dates</b>	<b>Total hours recorded</b>
<b>BBC1</b>	Mon-Sun 6-10pm	April – 19 <sup>th</sup> -25 <sup>th</sup> May – 17 <sup>th</sup> -23 <sup>rd</sup> June – 14 <sup>th</sup> -20 <sup>th</sup>	84
<b>BBC2</b>	Mon-Sun 6-10pm	April – 19 <sup>th</sup> -25 <sup>th</sup> May – 17 <sup>th</sup> -23 <sup>rd</sup> June – 14 <sup>th</sup> -20 <sup>th</sup>	84
<b>ITV1</b>	Mon-Sun 6-10pm	April – 19 <sup>th</sup> -25 <sup>th</sup> May – 17 <sup>th</sup> -23 <sup>rd</sup> June – 14 <sup>th</sup> -20 <sup>th</sup>	84
<b>Channel 4</b>	Mon-Sun 6-10pm	April – 19 <sup>th</sup> -25 <sup>th</sup> May – 17 <sup>th</sup> -23 <sup>rd</sup> June – 14 <sup>th</sup> -20 <sup>th</sup>	84
<b>Channel 5</b>	Mon-Sun 6-10pm	April – 19 <sup>th</sup> -25 <sup>th</sup> May – 17 <sup>th</sup> -23 <sup>rd</sup> June – 14 <sup>th</sup> -20 <sup>th</sup>	84

In summary, the most widely available and most popularly watched broadcasts on the most frequently viewed channels were therefore selected for inclusion as this would ensure that the programmes investigated would represent those that the greatest number of people in the UK would have seen.

### ***3.3.2 Coding of television programming***

As with the films viewed and coded, before watching any of the television broadcasts that were recorded a detailed coding guide was developed to ensure that the appropriate information would be identified and collected from the broadcasting, and also to ensure that exactly the same information was recorded for each of the broadcasts. This coding guide was based on the aims and objectives of the research as well as previous research in the areas of tobacco and alcohol content in television broadcasting<sup>229-231 236-244 246-248 262 263 265-272 323 335</sup>

<sup>336</sup>. Three categories of coding were developed; background information, tobacco information, and alcohol information.

### **3.3.2.1 Background information**

Background information, tobacco imagery, and alcohol imagery were therefore recorded for all television broadcasting. In addition to the background information recorded above, (month, date, day, channel, time of broadcast), the programme title was recorded, and whether or not the broadcast occurred before or after the watershed was recorded. The other *background information* that was recorded was *genre*. Genre was categorised into 12 separate programme categories; comedy, drama, soap operas, news, game shows, feature films, chat shows, sport, party political broadcast, documentary, "reality" TV, sci-fi/fantasy. Additionally, advertisements (programming trailers and commercial advertising) were coded for. The genre categories classified were identified through the programme announcement, Internet movie database (IMDb) which in addition to being a database holding information about films, also holds some information on television programmes, the channel's webpage where the programme was broadcast, or the researchers discretion.

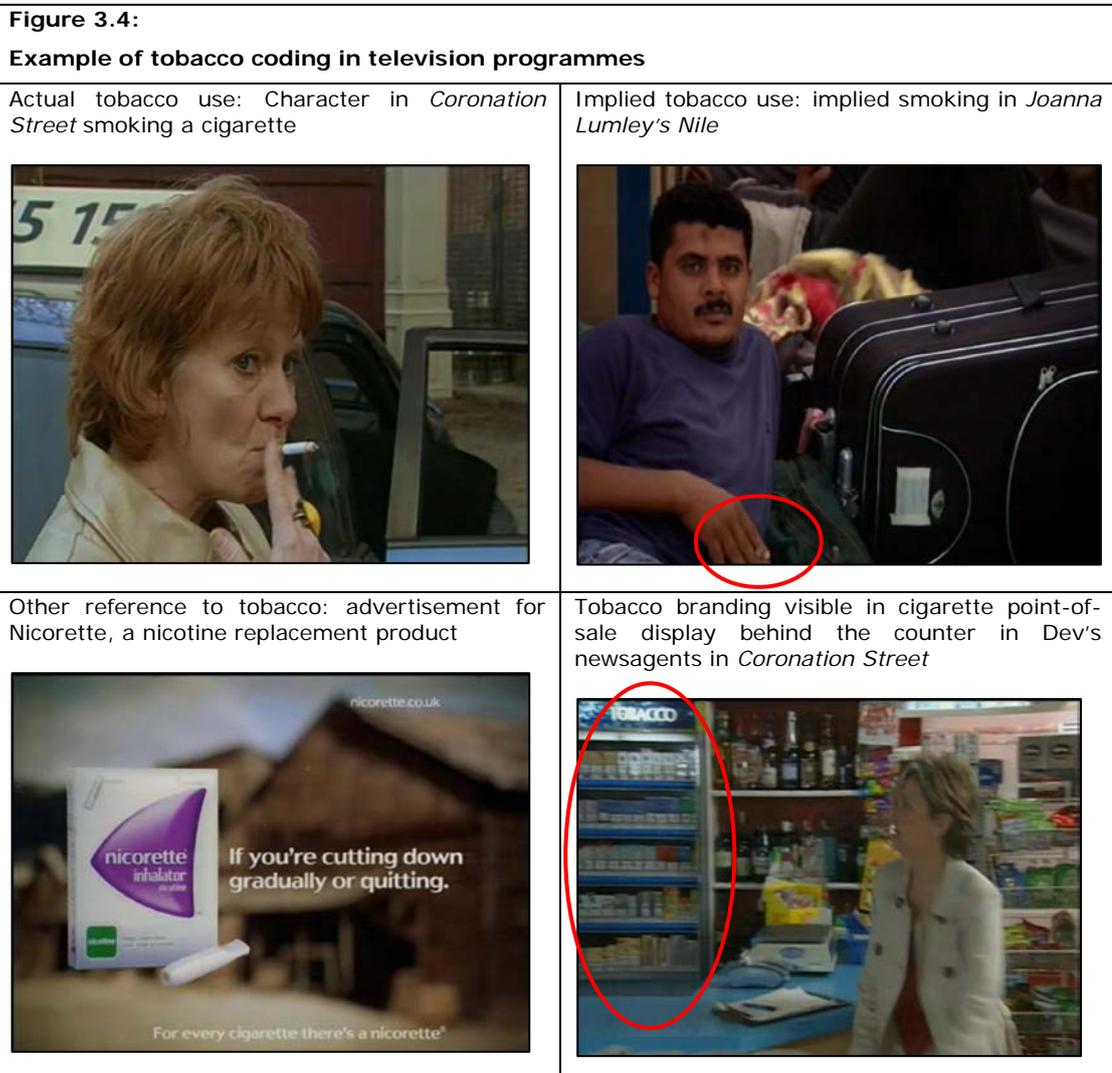
Advertisements were coded the same regardless of whether they were commercial (promoting a product or service), or were broadcasting trailers (promoting an upcoming show, film, series, or the channel itself). On the two BBC channels only broadcasting trailers were shown, and there was no paid-for advertising between programmes on these stations. On the three commercial stations (ITV1, Channel 4, and Channel 5) a mixture of commercial advertising, broadcasting trailers or general promotion of the channel were common.

Therefore both commercial and broadcasting advertisements could be seen together in the same advertising break.

### **3.3.2.2 Tobacco episodes**

The *tobacco information* that was recorded was *any tobacco, actual tobacco use, implied tobacco, tobacco paraphernalia, other reference to tobacco, tobacco brand appearances* (see **figure 3.4**). *Any tobacco* was defined as the presence of at least one of the following tobacco coding categories. *Actual tobacco use* was defined as the actual use of tobacco on-screen by any character. In addition to coding its presence, or absence, the type of tobacco being used on-screen was also coded for (Cigarette, cigar, pipe, other (e.g. water pipe, chewing tobacco)). *Implied tobacco use* was defined as the presence of any inferred tobacco use, without actual use occurring on-screen (e.g. a comment about going for a cigarette, or a smoky atmosphere). In addition to coding for its presence or absence, implied tobacco use was categorised as verbal or non-verbal. *Tobacco paraphernalia* was coded when the presence on-screen of tobacco or tobacco related materials were evident. In addition to coding its presence, or absence, each occurrence was coded by the type of appearance (cigarette/tobacco packs, matches, lighter, ashtray, no smoking or smoking area signs, or any other). *Other references to tobacco* was coded if any other reference to tobacco was made that was not actual or implied use, and this was coded as being either verbal or non-verbal. *Tobacco brand appearance* was coded for when the presence of clear and unambiguous tobacco branding was evident on-screen whether visible on a product used or otherwise visible in an interval, or in an advertisement (within a programme), logo's or other recognisable materials. The type of branding that appeared was additionally

recorded (cigarette or tobacco box, packet, carton; advertisement e.g. billboard, TV advert, poster; merchandise e.g. branded ashtray; other (noted).



### 3.3.2.3 Alcohol episodes

The alcohol information that was recorded was coded as *any alcohol*, *actual alcohol use*, *implied alcohol use*, *other reference to alcohol*, and *alcohol brand appearances* (see **figure 3.5**). *Any alcohol* was defined as the presence of at least one of the following alcohol coding categories. *Actual alcohol use* was

defined as the actual use of alcohol on-screen by any character. In addition to coding its presence, or absence, the type of alcohol being used on-screen was also coded for (beer, wine/champagne, spirits/liqueur, cocktails, mixed drink types (such as in a group or crowd scene), type unknown). *Implied alcohol use* was defined as the presence of any inferred alcohol use, without actual use occurring on-screen. In addition to coding for its presence or absence, implied alcohol use was categorised as the visible appearance, but not consumption of an alcoholic drink, a verbal reference to alcohol use e.g. ordering a drink, behaviour such as drunkenness, any other appearance (noted). *Other reference to alcohol* was coded when any other reference to alcohol was made. This was coded as the presence of products, but not actually being used and those that did not indicated any implied use (e.g. bottles or beer pumps behind a bar), or a verbal or written comment or discussion that was unrelated to actual or implied current use. *Alcohol brand appearance* was coded as having occurred when the presence of clear and unambiguous alcohol branding was evident on-screen whether visible on a product used or otherwise visible in an interval, or in an advertisement, logo's or other recognisable materials. The type of branding that appeared was additionally recorded (branding on product used in scene, branding on product not used in scene (such as in the background), branded merchandise (e.g. beer mats, promotional ashtray), advertisements (e.g. actual advertisement for an alcohol product, or posters billboards etc visible in actual television broadcasting), any other (noted).

**Figure 3.5:**

**Example of alcohol coding in television programmes**

Actual alcohol use: Character in *Emmerdale* drinks a pint of beer



Implied alcohol use: (visual) in a programme trailer for *Marco's kitchen Nightmare*, drinks visible on table in front of guest diners



Implied alcohol use: (verbal) in *Emmerdale*, character verbally orders a drink



Alcohol branding: pitch side alcohol advertising for *Vod Kat* in news coverage of a sporting event in *ITV Central News*



**3.3.3 Data collection**

The broadcasting that was identified for study were recorded onto recordable DVD players, and viewed and coded in no particular order. Coding was carried out using one-minute intervals, where the presence or absences of tobacco and/or alcohol appearances on-screen were recorded as having occurred, or not, in each single minute of the recorded television broadcast. Tobacco and/or alcohol were recorded as having occurred if they were observed on-screen at least once in any one-minute coding period. Where multiple occurrences in the

same category in the same one-minute interval occurred, this was considered a single event. Occurrences that crossed a transition from one one-minute interval to the next were recorded as having occurred in two separate intervals, and thus as two separate appearances. However, if occurrences were in different coding categories (e.g. if actual tobacco use and paraphernalia occurred in the same interval) then these were recorded as two separate instances. Additionally, since changes from one programme to the next, or breaks in a programme for advertising frequently did not occur at the end of a one-minute interval, we coded part-minutes immediately before programme changes. For the minutes that crossed over the transition from advertisements to programmes, and vice versa, half the minute was considered advertising, and half as programming, and recorded as part-minutes.

#### **3.3.4 Analysis**

Data were entered into a database in Microsoft Office Excel<sup>369</sup>, and analysed in Excel. Tobacco use, tobacco paraphernalia, inferred tobacco use, tobacco brand appearances, alcohol use, implied alcohol use, other alcohol reference, and alcohol brand appearances were expressed as either occurrences in one-minute intervals, or occurrences of one-minute intervals in programmes or advertisements/trailers.

To determine which form of tobacco use, tobacco paraphernalia and inferred tobacco use, as well as alcohol use, implied alcohol use, and other alcohol references most commonly occurred in television broadcasting, the number of episodes by type of tobacco consumed (cigarette, pipe, cigar or other tobacco), type of paraphernalia present (cigarette/tobacco packet, matches, lighter, ashtray and other), and type of inferred tobacco use evident (verbal,

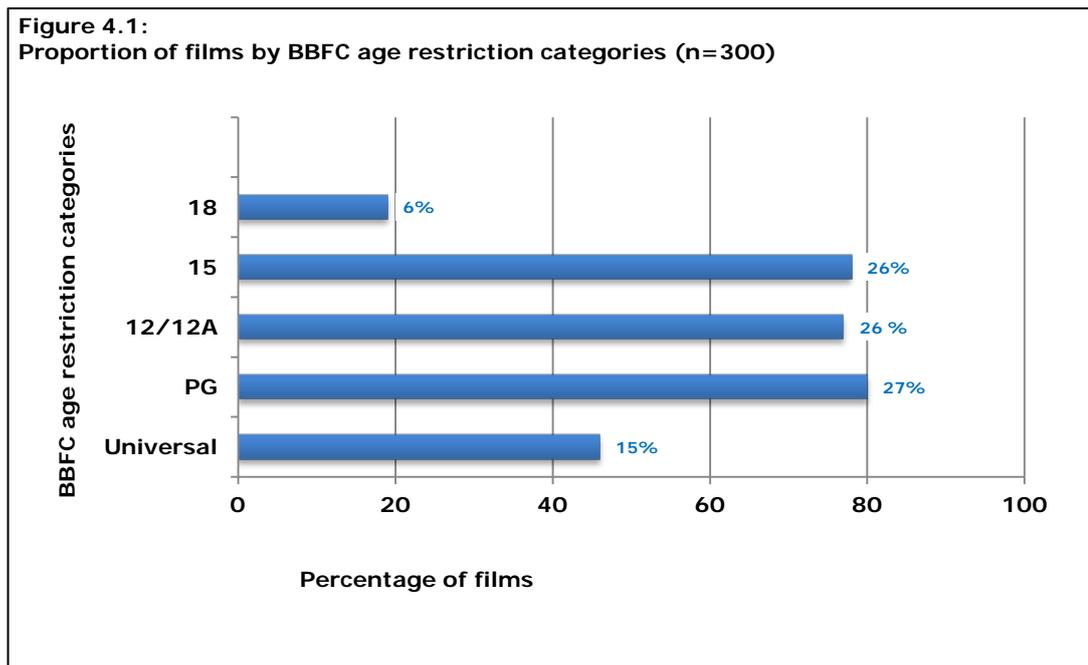
non-verbal and other), type of alcohol use (beer, wine or champagne, spirits or liqueurs, cocktails, mixture of drink types (such as in a group or crowd scene), type of implied alcohol use (visible appearance, verbal reference, behaviour, or any other appearance implying use), type of other alcohol references (presence of alcohol products such as beer pumps, or bottles, or cans, without actual or implied consumption, or a verbal comment or discussion that was unrelated to actual current use) were determined using summary commands in Excel. This was the same approach used to estimate tobacco and alcohol episodes by Channel and genre.

Then the different proportions of programmes by genre were determined to ascertain which category of programme genre different appearances occurred in. Programmes containing branding and the actual brands that appeared were then examined to determine which brands appeared most frequently (in absolute terms of frequency of one-minute intervals), which programmes the most brands appeared in, and which brands appeared in the most programmes.

## Chapter 4: Tobacco in film results

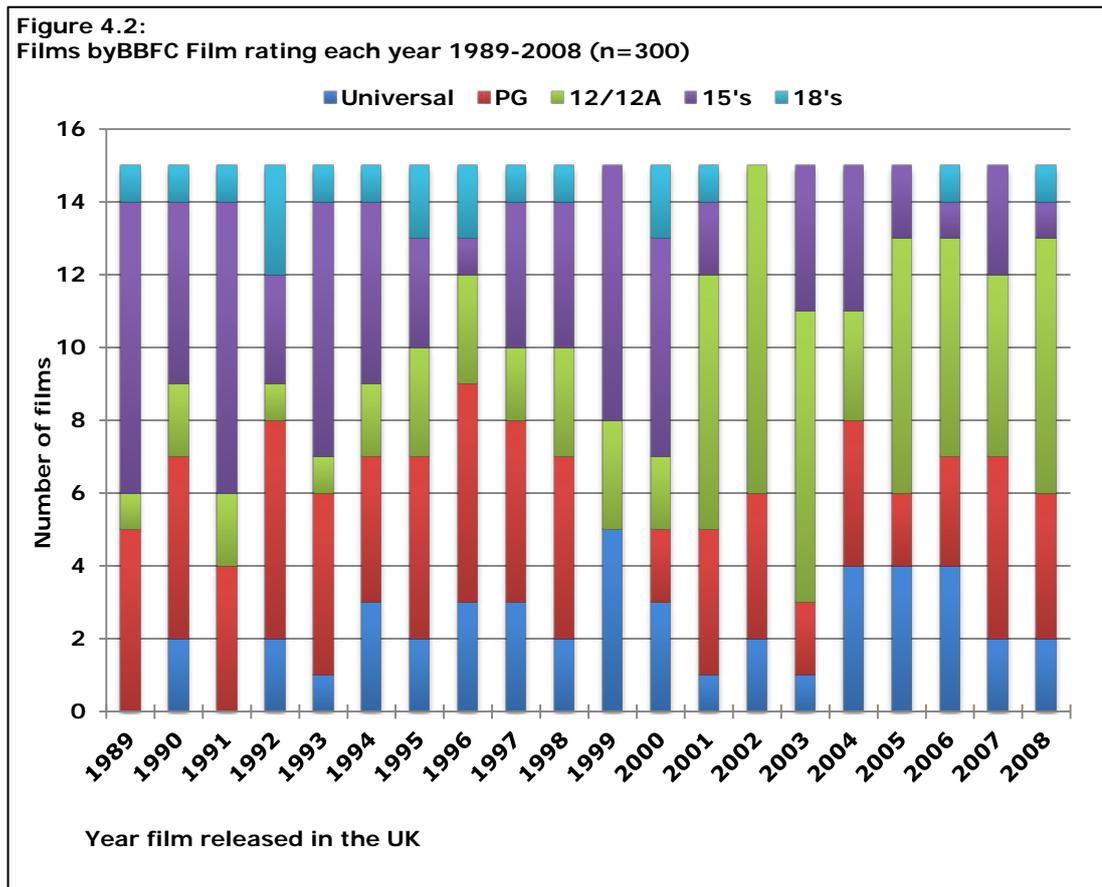
#### 4.1 Information on films

The 300 films (**appendix 1**) totalled 582.8 hours (34,969 minutes) of film time. The mean film duration was 116.7 (SD 24.7) minutes (1.9 hours), ranging from 78 minutes (*Inspector Gadget, 1999, Universal*)<sup>374</sup> to 224 minutes (*Dances with Wolves, 1991, 15*)<sup>375</sup>. A total of 6,994 five-minute intervals (mean 23.3, range 15.6 to 44.8 per film) were content coded for episodes of tobacco. The majority of films were in the PG (n=80), 12/12A (n=77) and 15 (n=78) British Board of Film Classification (BBFC) film rated categories (see **figure 4.1**), and the fewest (n=19) were rated 18. There were 46 films rated Universal.



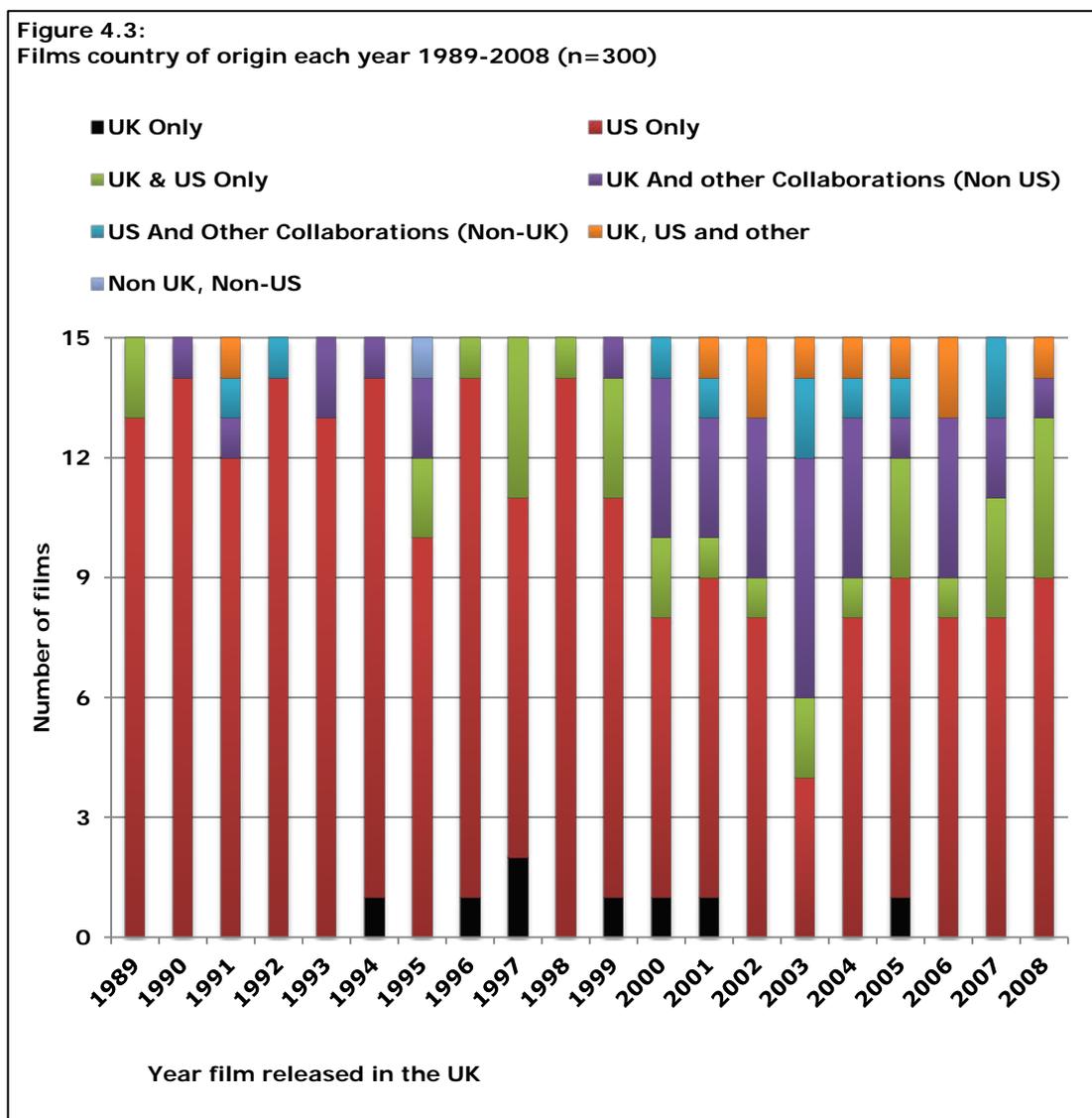
The distribution of films by each of the BBFC categories each year over the twenty year period can be seen in **figure 4.2**. There is a sharp increase in 12/12A rated films between 2001 and 2002 and this is possibly the result of the change in the BBFC rating system in 2002 when the classification category 12,

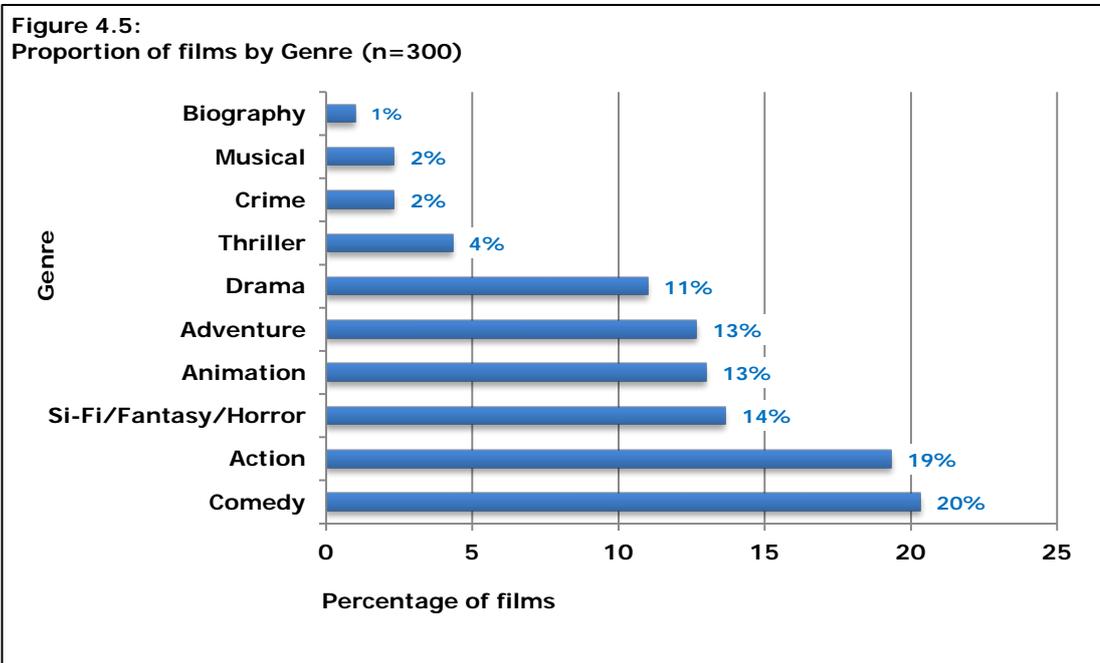
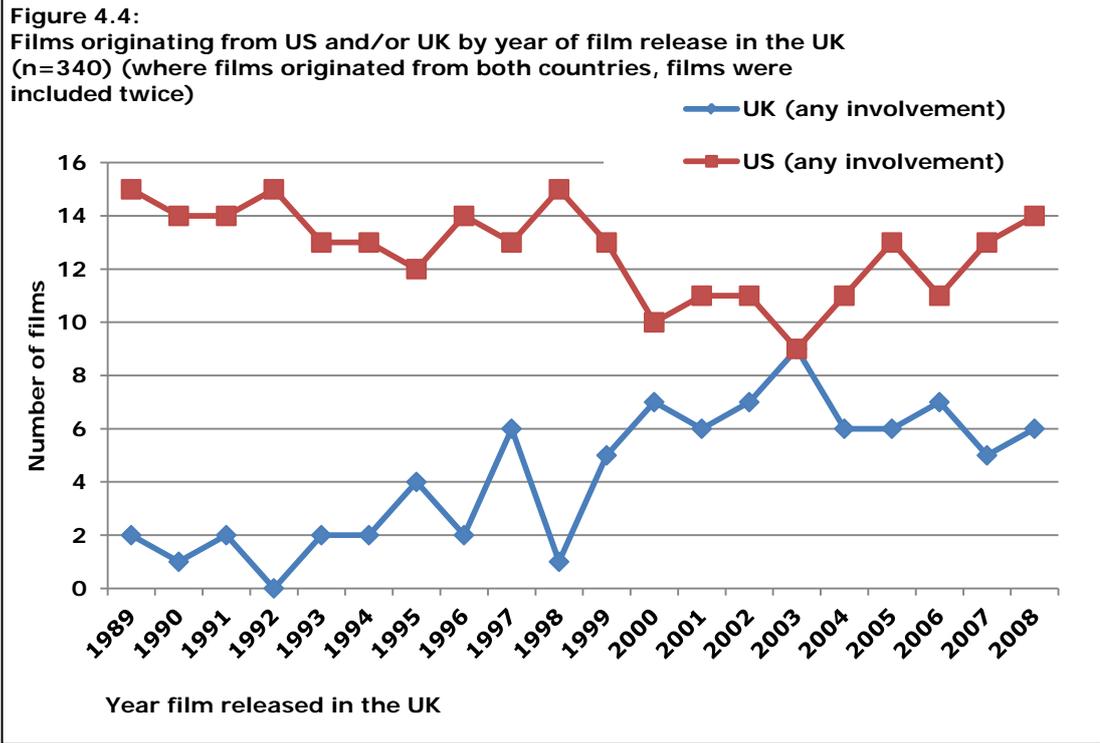
meaning suitable for 12 years old and over, was replaced with a 12A category, where those under 12 years old are permitted to watch the film but only when they are accompanied by an adult aged 18 and over. This may also explain the fall in PG immediately before the 12/12A rise.



Most films were produced by or in partnership with US companies; 203 (203/300; 68%) were solely US produced, and 281 (281/300; 94%) with some level of US involvement. There were 8 (8/300; 3%) solely UK produced films, and 59 (59/300; 20%) with some UK involvement. Countries other than the UK and US were involved in 57 (57/300; 19%) films. Only one film, *Muriel's Wedding* (1995, 15)<sup>376</sup>, had no UK or US company involvement, and was

produced in collaboration between Australian and French production companies. The distribution of films by country of origin each year between 1989 and 2008 can be seen in **figure 4.3**. The distribution over the twenty year period of films with at least some US involvement and films with at least some UK involvement can be seen in **figure 4.4** (where films were collaborative works and involved both UK and US involvement they were considered twice). The breakdown of film genre is shown in **figure 4.5**.

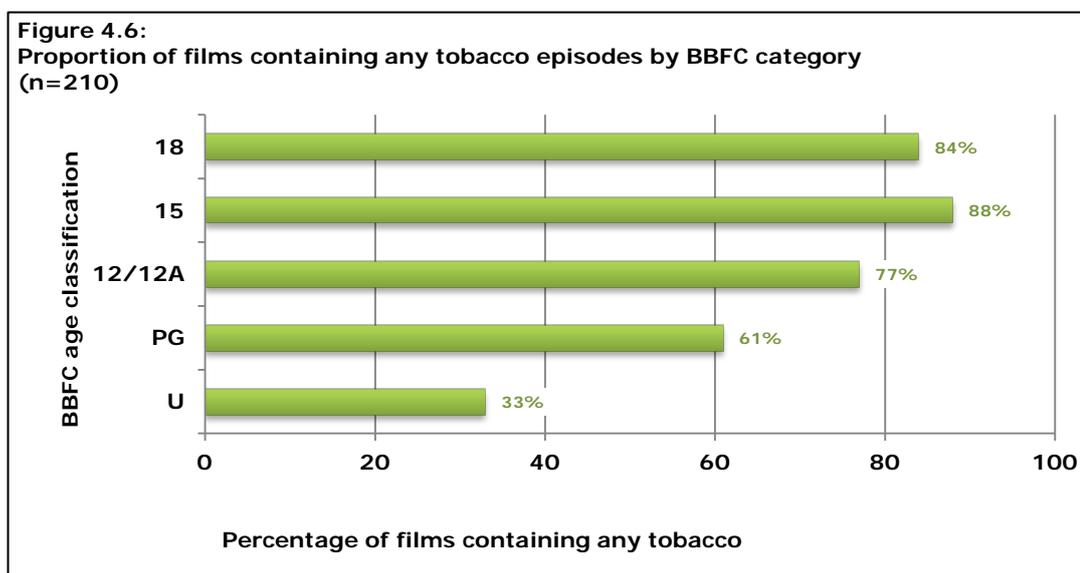




## 4.2 Results

### 4.2.1 All tobacco episodes

At least one tobacco episode occurred in 1,151 five-minute intervals (1151/6994; 17% of the total number of intervals), and in 210 (210/300; 70%) of the films. The respective proportions of films containing at least one episode of tobacco by BBFC age classification U, PG, 12/12A, 15 and 18 categories were 33% (15/46), 61% (49/80), 77% (59/77), 88% (69/78) and 84% (16/19) respectively (**figure 4.6**). The majority of tobacco episodes occurred in films rated by the BBFC as appropriate for children and young people aged 15 or under to view. Tobacco episodes occurred in 68% (192/281) of all youth rated films (BBFC 15 and lower age classification categories), and 61% (123/203) of films rated in the BBFC 12/12A and lower age classification categories.



Tobacco episode occurrence, in total or any category except branding, was unrelated to country of origin or genre of film. The mean rate of occurrence

of all tobacco episodes fell substantially and significantly ( $p < 0.05$ ) between 1989 and 2008, from 3.5 to 0.6 per hour; similar trends occurred for all categories of tobacco episodes (**figure 4.7**), in each case  $p < 0.05$ , except for branding where  $p = 0.315$ ). The occurrence of tobacco episodes in these films also fell substantially within each of the BBFC age classification categories (**figure 4.8**). These results were significant for both all tobacco episodes and tobacco use episodes for PG, 12/12A, and 15 rated films ( $p < 0.05$ ), but were non-significant for Universal rated (all tobacco episodes  $p = 0.153$ , tobacco use episodes  $p = 0.209$ ) and 18 rated (all tobacco episodes  $p = 0.232$ , and tobacco use episodes  $p = 0.352$ ) films.

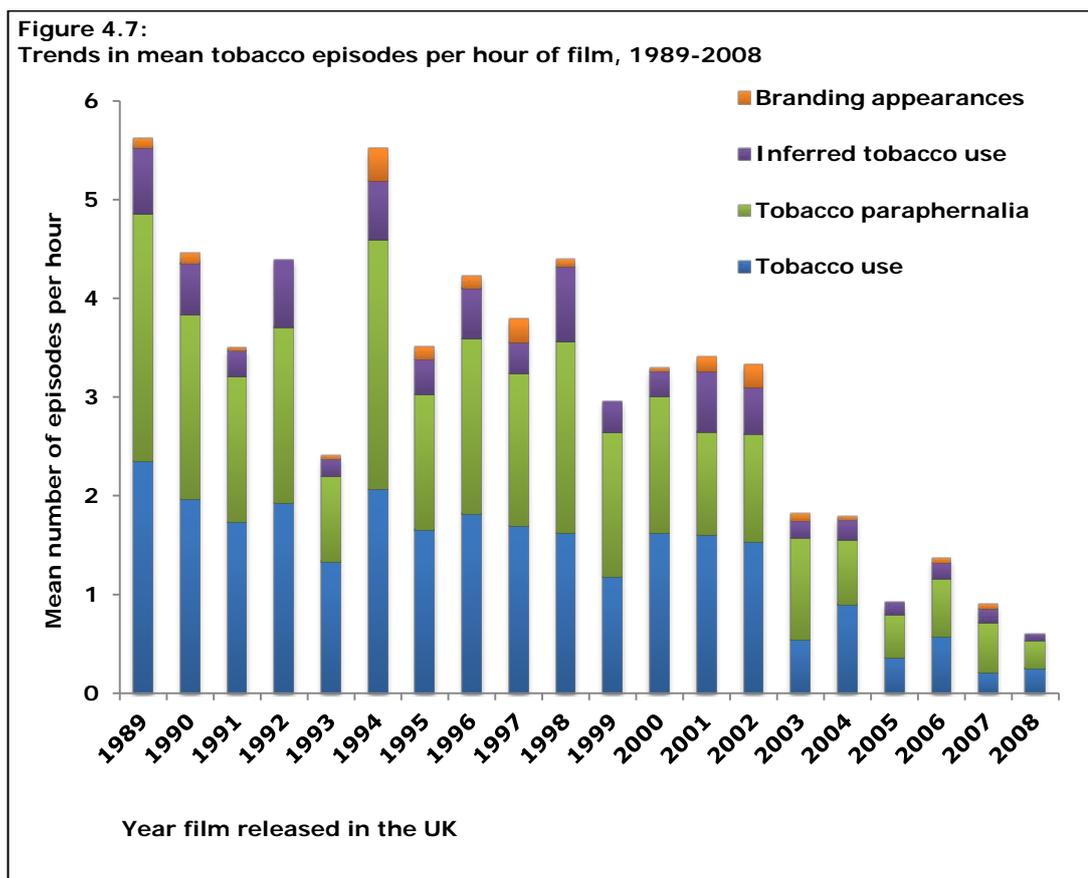
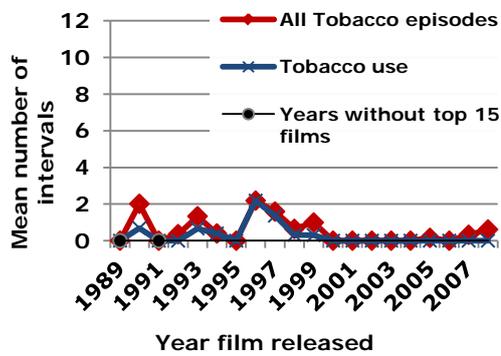


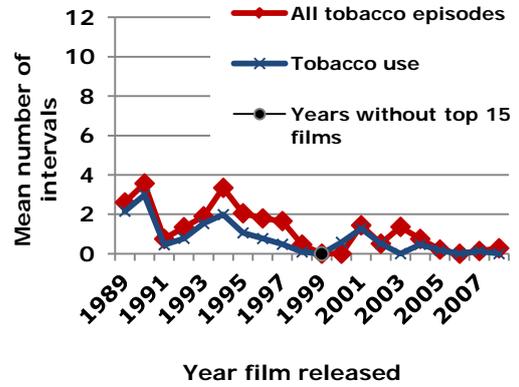
Figure 4.8:

Trends in all tobacco episodes and tobacco use episodes per hour per year by BBFC category (all figures expressed as means)

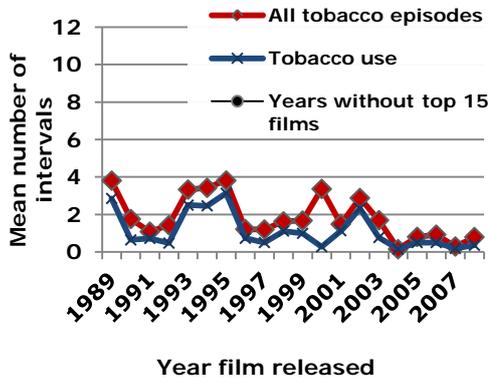
a) Universal (U): (n=46)



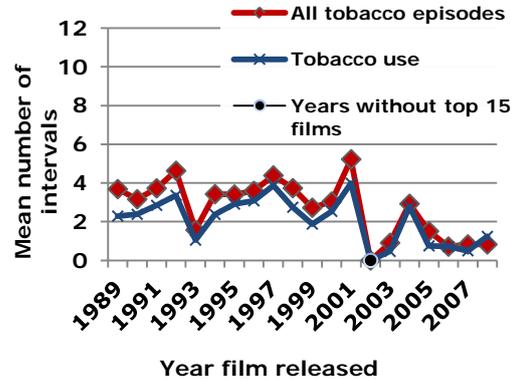
b) Parent Guidance: (n=80)



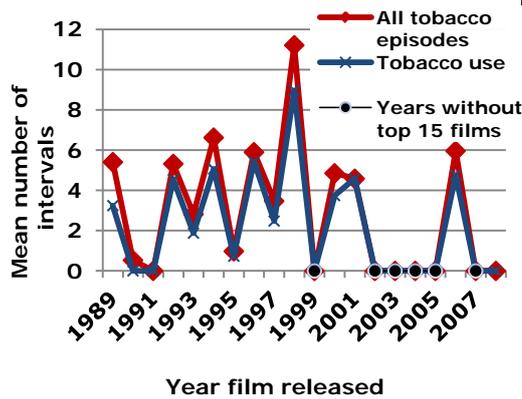
c) 12/12A: (n=77)



d) 15's: (n=78)



e) 18's: (n=19)



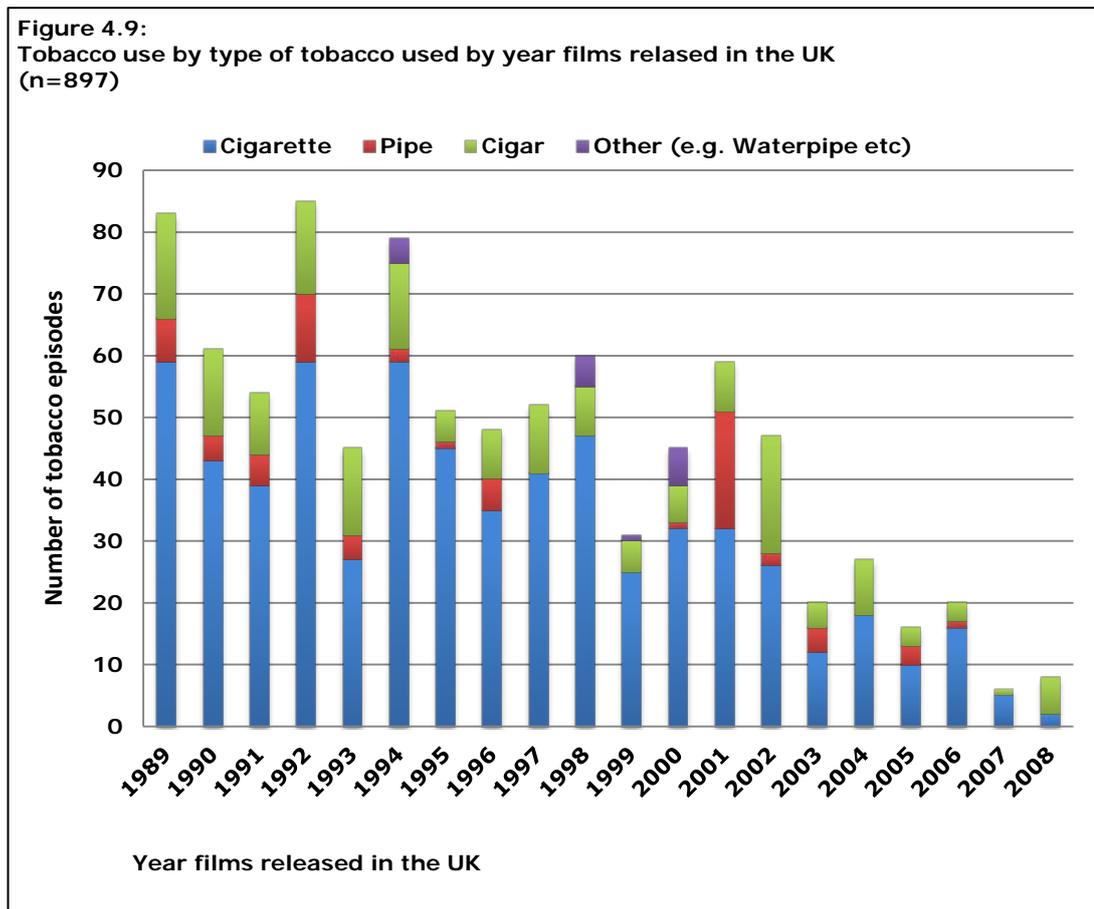
#### 4.2.2 Tobacco use episodes

Episodes of actual tobacco use occurred in 176 (176/300; 59%) of all the films. The mean number of tobacco use episodes per film was 1.35 (interquartile range (IQR) 0-4) per hour. The hourly count of tobacco use episodes by year is plotted in **figure 4.7** (above) showing a tenfold fall over the twenty year study period, from 2.35 in 1989 to 0.25 in 2008, and, as can be seen from **figure 4.8** (above), there has been no actual tobacco use seen in Universal rated films since 2000. However, 92% (162/176) of films containing tobacco use were BBFC 15 or lower categories of classification, and more than half (98/176; 56%) were BBFC 12/12A or lower categories.

There were 897 episodes of actual tobacco use in 59% of films (**table 4.1**). Cigarette smoking accounted for the majority of actual tobacco use in these films, there being 632 episodes containing cigarette smoking (71%; 632/897), compared with 180 (20%; 180/897) cigar smoking, 69 (8%; 69/897) pipe smoking, and 16 (2%; 16/897) other tobacco use (e.g. water pipe, hookah, chewing tobacco).

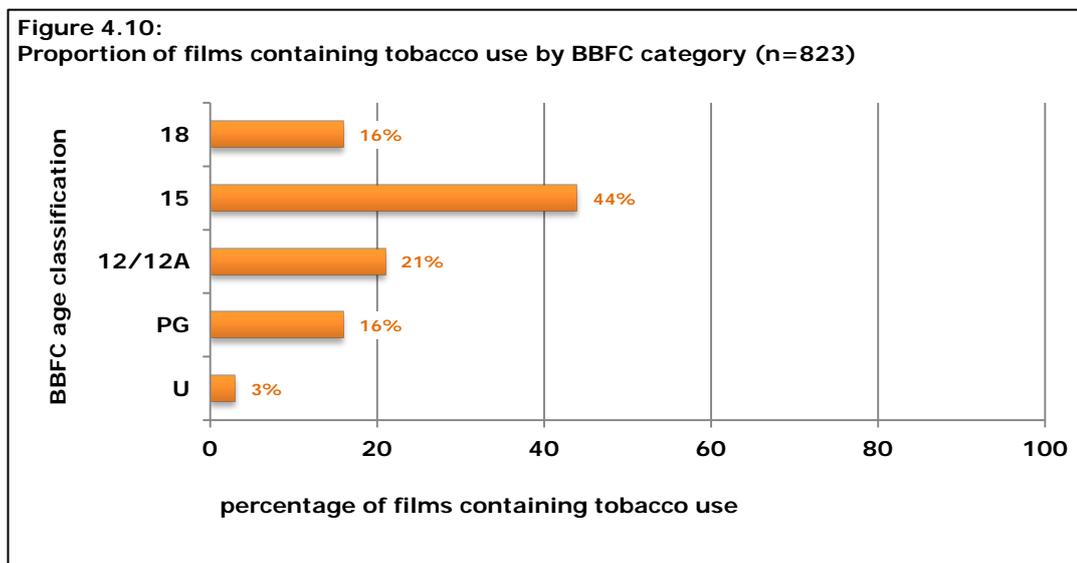
Tobacco use category	Proportion of films	Proportion of tobacco use episodes
<b>Cigarette smoking</b>	<b>79%</b> (139/176)	<b>71%</b> (632/897)
<b>Cigar smoking</b>	<b>14%</b> (25/176)	<b>20%</b> (180/897)
<b>Pipe smoking</b>	<b>50%</b> (88/176)	<b>8%</b> (69/897)
<b>Other tobacco use</b>	<b>3%</b> (5/176)	<b>2%</b> (16/897)

Although the total number of episodes of tobacco use declined over the 20 year period, cigarette smoking remained the most commonly depicted type of tobacco use for each of the years investigated, with the only exception being 2008 where cigar smoking was the most evident form of tobacco use (**figure 4.9**). Although the depiction of each category of tobacco use (cigarette, pipe, cigar, and other) declined over the study period, this was only significant for cigarette and cigar smoking ( $p < 0.05$ ). Pipe smoking ( $p = 0.203$ ) and other tobacco use ( $p = 0.825$ ) did not fall significantly.



The proportion of films containing episodes of tobacco use by BBFC age certification categories is shown in **figure 4.10**. Of the 176 films containing

episodes of tobacco use, 92% (162/176) were rated by the BBFC as suitable for those aged 15 and younger to watch, and 56% (98/176) were rated as suitable for those aged under 15 years old to watch (BBFC 12/12A and lower age classification categories). As stated above there have been no tobacco use episodes in Universal rated films since 1999, see **figure 4.8** above. Of the absolute number of five-minute intervals containing at least one episode of tobacco use ( $n=823$ ), 84% (694/823) occurred in films classified as suitable for viewers aged less than 18 years. The highest frequency of tobacco use episodes (44%; 366/823) occurred in films rated 15, with 21% (169/823) in 12/12A, 16% (134/823) in PG, 16% (129/823) in 18's, and 3% (25 /823) in U classified films (see **figure 4.10** below).



#### **4.2.3 Tobacco paraphernalia**

Some kind of tobacco paraphernalia appeared in 180 films (60%; 180/300), and 762 five-minute intervals (10%; 762/6994). The most commonly depicted paraphernalia was ashtrays, either alone or with other paraphernalia, appearing

in 64% (116/180) of films that contained tobacco paraphernalia, and 42% (323/762) of five-minute intervals that contained tobacco paraphernalia (**table 4.2**).

**Table 4.2:**  
**The proportion of films (n=180) and the proportion of five-minute intervals (n=762) that contain tobacco paraphernalia by category**

<b>Tobacco paraphernalia category</b>	<b>Proportion of films</b>	<b>Proportion of tobacco paraphernalia episodes</b>
<b>Ashtrays</b>	<b>64%</b> (116/180)	<b>42%</b> (323/762)
<b>Cigarette/tobacco packets</b>	<b>62%</b> (112/180)	<b>33%</b> (252/762)
<b>Lighters</b>	<b>50%</b> (89/180)	<b>30%</b> (225/762)
<b>Matches</b>	<b>26%</b> (46/180)	<b>10%</b> (75/762)

#### **4.2.4 Inferred tobacco use**

*Inferred tobacco use* occurred in 223 five-minute intervals in 94 out of the 300 films (31%). Episodes of inferred use were more frequently non-verbal (e.g. walking out of a scene with a cigarette and a lighter, or a smoky atmosphere - 80%; 179/223 episodes; 82%; 77/94 films), compared with verbal (e.g. a comment about going for a cigarette - 20%; 44/223 episodes; 37%; 35/94 films). Both verbal and non-verbal inferences of tobacco use occurred in 18 films (19%; 18/94).

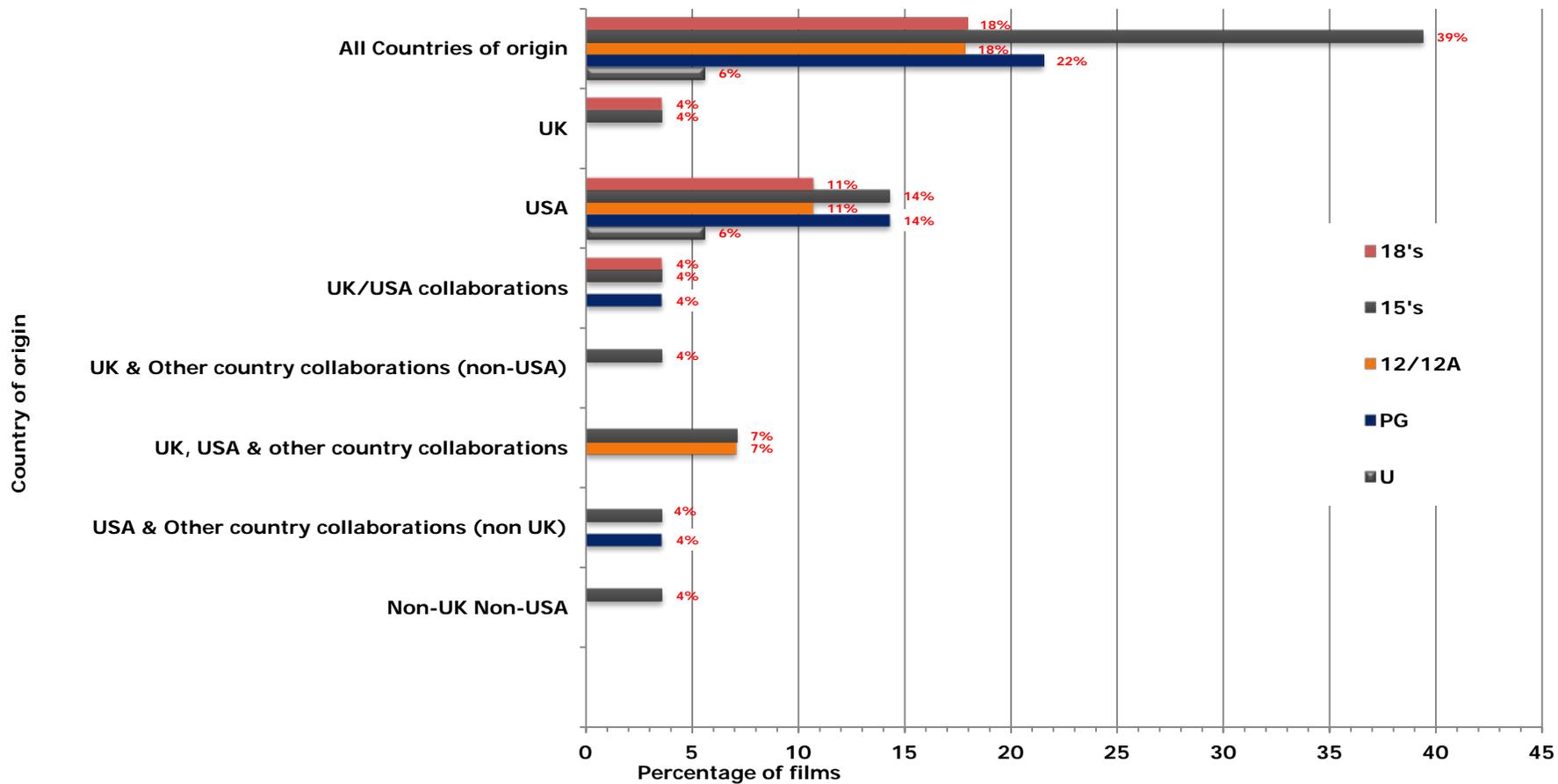
#### **4.2.5 Tobacco brand appearances**

A total of 48 episodes of tobacco branding occurred in 28 (9.3%) of the 300 films. The distribution of these brand appearances by BBFC rating category and

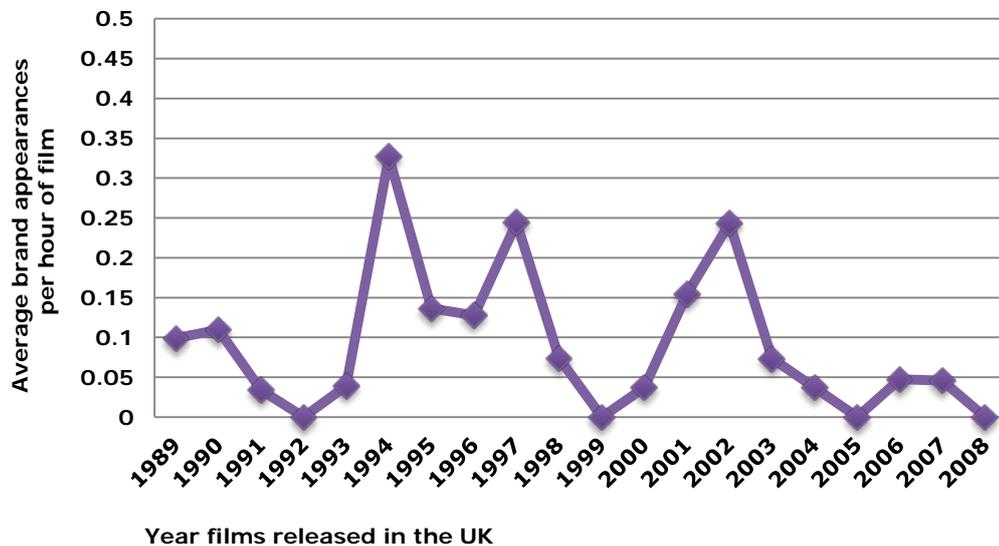
country of origin can be seen in **figure 4.11**. The majority of brand appearances occurred in films originating from the US. Ten of the 28 films showing tobacco branding had some UK involvement in funding (35.7%) whereas 24 of the 28 films had some involvement from the US (85.7%). As several of the films were collaborative works and thus were made with both US and UK involvement, where films were made involving both UK and US input, they were considered twice. When these proportions of films with brand appearances from the UK (10/28) and the US (24/28) were compared to brand appearances in all films with UK (59) and US involvement (281), films from the UK had a higher proportion of brand appearances (16.9%; 10/59) than the US (8.5%; 24/281). This difference was statistically significant (Chi<sup>2</sup> p-value <0.05).

The majority of brand appearances occurred in films rated acceptable for viewing by young people; 39.4% in films rated 15, 17.8% 12/12A, 21.5% PG, and 5.6% U. Only 17.9% of films containing brand images were rated 18. Like all of the other categories of tobacco episodes, the average appearance of tobacco branding per hour each year in the films assessed appears to have declined over time (**figure 4.12**), however, this was not statistically significant, p=0.315.

**Figure 4.11:**  
**The proportion of brand appearances by country of origin and BBFC category: (n=28)**



**Figure 4.12:**  
Average appearances of tobacco branding per hour per year in the UK  
1989-2008 (n=48)



The number of appearances of individual brands in the films studied is illustrated in **figure 4.13**, and the individual films in **table 4.3**. Two brands, *Marlboro* and *Silk Cut*, accounted for the majority of appearances, 21 and 14 respectively.

The film with the highest number of five-minute intervals containing tobacco branding was *Pulp Fiction* (1994, 18)<sup>377</sup>, which had tobacco brand appearances in 9 out of 31 five-minute intervals contained in the film (see **figure 4.14** for examples). The predominant brand involved within the film was *Red Apple*, a fictional brand used only in films directed by Quentin Tarantino but which can be purchased from a movie prop supplier<sup>378</sup>. The largest number of brands to appear in any film was 12, in *Bridget Jones's Diary* (2001, 15)<sup>379</sup>, see **figure 4.15**.

*Marlboro* branding appeared in 13 of the films studied, and the films ranged from PG to 18 BBFC certifications, with the only age restricted category

without any appearances of *Marlboro* being those that were rated Universal. The majority of *Marlboro* brand appearances (95.3%) occurred in films with some US involvement, versus 19% with UK involvement. The film with the highest intensity of *Marlboro* brand appearances was *Terminator 3: Rise of the Machines* (2003, 15) (figure 4.16)<sup>380</sup> with a total of 6 appearances, all in one scene set in within a petrol station in the US. The brands were present in behind the counter displays, various cigarette packets and cartons, as well as an advertisement hanging from the ceiling of the interior.

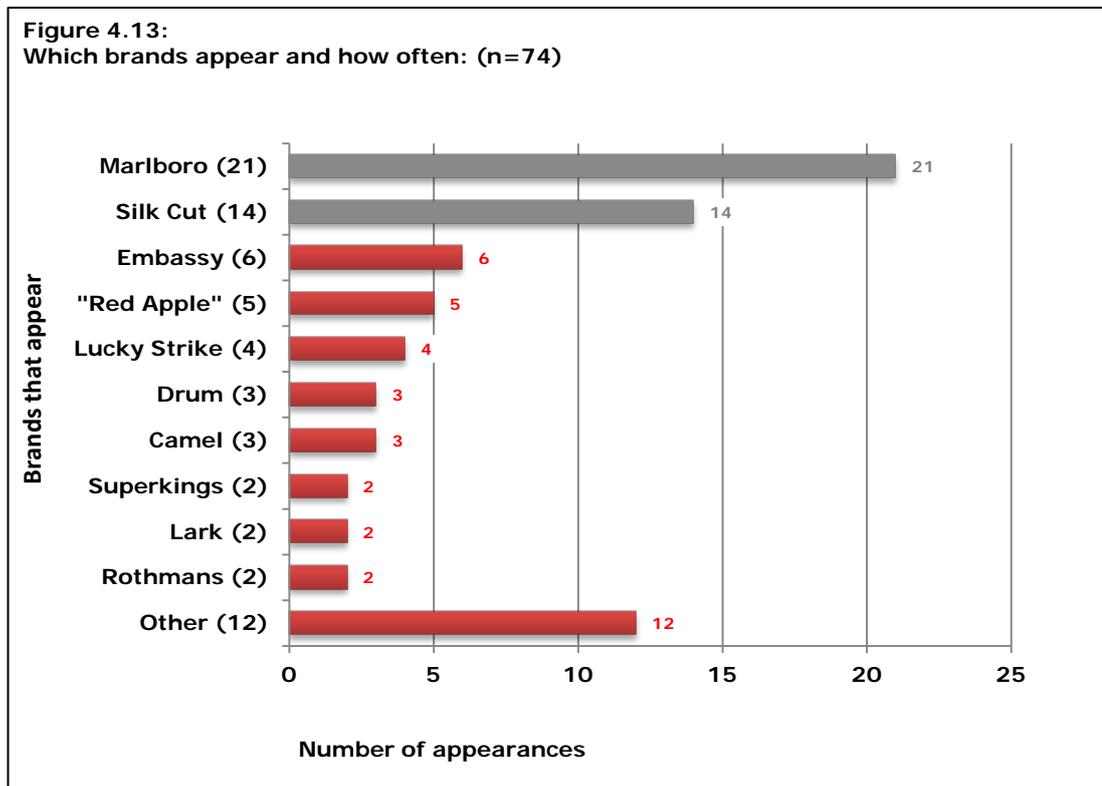


Figure 4.14:

**Examples of tobacco brand appearances shown in Pulp Fiction**

*Mia Wallace* (Uma Thurman) holds a packet of Red Apple branded cigarettes



On the table in front of *Mia Wallace* (Uma Thurman) is a packet of Drum branded tobacco



Marlboro gold branded cigarettes on a table in the background of a scene



*Butch Coolidge* (Bruce Willis) verbally orders Red Apple branded cigarettes



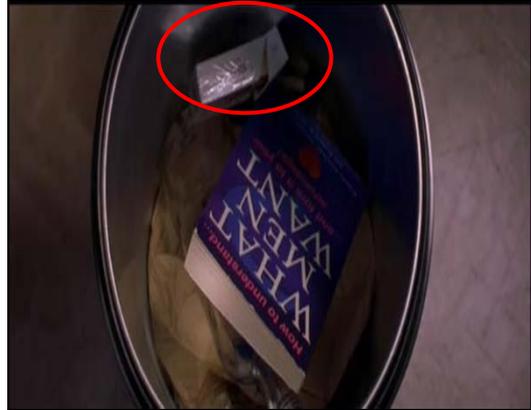
Figure 4.15:

**Examples of tobacco brand appearances shown in Bridget Jones's Diary**

Packet of Silk Cut branded cigarettes on table in front of *Bridget Jones* (Renne Zellweger) and her friends



Packet of Silk Cut branded cigarettes in the rubbish bin in Bridget's flat



Packet of Silk Cut branded cigarettes on *Bridget Jones's* (Renne Zellweger) desk in her office



Packets of Silk Cut (circled) and other branded tobacco products displayed behind the counter in a newsagents



**Figure 4.16:**

**Examples of tobacco Marlboro brand appearances shown in Terminator 3: rise of the machines**

Packets of Marlboro (circled) and other branded tobacco products displayed behind the counter in a petrol station



Packets of Marlboro (circled) and other branded tobacco products displayed above the counter in a petrol station, behind *the Terminator* (Arnold Schwarzenegger)



Packets of Marlboro (circled) and other branded tobacco products displayed behind the counter in a petrol station



Packets of Marlboro (circled) and other branded tobacco products displayed behind the counter in a petrol station



*Silk Cut*, appeared a total of 14 times, in four separate films (one of which, *Bridget Jones: The Edge of Reason* (2004, 15)<sup>381</sup> was a sequel to another, *Bridget Jones's Diary* (2001, 15)<sup>379</sup>) between the years 1996 and 2004. All of these films had some UK involvement, and all were set in the UK. The two films with the most *Silk Cut* brand appearances were *Bridget Jones's Diary* (2001, 15)<sup>379</sup> (see **figure 4.15** for examples) and *About a Boy* (2002, 12)<sup>382</sup> (see **figure 4.17** for examples), both of which were considered suitable for young people to view, with BBFC certificates 15 and 12 respectively. The main

character in *Bridget Jones's Diary* (Bridget Jones, played by the actress Renée Zellweger) smoked *Silk Cut* throughout the film. This film was based on a novel, by the same name, by Helen Fielding<sup>383</sup>. As in the film, the main character in the book, Bridget Jones, smoked, and smoked the cigarette brand *Silk Cut* (see **figure 4.18**). In the film *About a Boy*, also based on a novel by the same name as the film, by Nick Hornby, the main character Will, (played by the actor Hugh Grant in the film) smoked *Silk Cut* branded cigarettes throughout the duration of the film, and mostly did so in the presence of a 12 year old boy. However, although the main character in the book, also known as Will, smoked, he smoked far more infrequently, and there were no brands identified anywhere in the novel.

According to the *Female Celebrity Smoking List*, available on an online webpage<sup>384</sup> it appears that in real life Renée Zellweger is not a smoker. However, there is no documentation suggesting whether or not Hugh Grant is a smoker off screen.

**Figure 4.17:**

**Examples of tobacco Silk Cut brand appearances shown in About a Boy**

Silk cut branded packet of cigarettes on the table in front of *Will* (Hugh Grant) and *Marcus* (Nicholas Hoult)



Silk cut branded packet of cigarettes on the table in front of *Will* (Hugh Grant)



Silk cut branded packet of cigarettes on table in a restaurant in front of *Will* (Hugh Grant), *Marcus* (Nicholas Hoult) is also there



Silk cut branded packet of cigarettes on the table in front of *Will* (Hugh Grant)



Figure 4.18:

Excerpts from the book *Bridget Jones's Diary* by Helen Fielding<sup>383</sup> that shows Silk Cut branding

Page 28 -

*"Panic stricken, I reached for the Silk Cut."*

Page 46 –

*"What's going on? I went round the corner, shaking, for some Silk Cut."*

Page 188 –

*"'Exactly my point' spat Jude, trying to light up another Silk Cut but having trouble with the lighter"*

**Table 4.3:**

Films containing the most frequently depicted brands (Marlboro & Silk Cut), by year of UK release, country of origin, BBFC certification and number of appearances

<b>Marlboro (21 appearances)</b>				
<i>Title</i>	<i>Release year</i>	<i>Country of origin</i>	<i>BBFC rating</i>	<i>Number of appearances*</i>
See no Evil Hear no Evil	1989	US	15	1
The Commitments	1991	Ireland/UK/US	15	1
Pulp Fiction	1994	US	18	2
Interview with the vampire	1995	US	18	1
Stargate	1995	France/US	PG	2
Muriel's Wedding	1995	Australia/France	15	1
Men in Black	1997	US	PG	1
Bean	1997	UK/US	PG	1
Sleepers	1997	US	15	1
Sliding Doors	1998	UK/US	15	1
Men in Black 2	2002	US	PG	2
Terminator 3: Rise of the Machines	2003	US/Germany/UK	12A	6
The Simpson's Movie	2007	US	PG	1
<b>Silk Cut (14 appearances)</b>				
<i>Title</i>	<i>Release year</i>	<i>Country of Origin</i>	<i>BBFC rating</i>	<i>Number of appearances</i>
Trainspotting	1996	UK	18	1
Bridget Jones's Diary	2000	UK/France	15	6
About a Boy	2002	US/UK/France/Germany	12	6
Bridget Jones: The Edge of reason	2004	UK/France/Germany/Ireland/US	15	1
* based on number of five-minute intervals where branding appears. Where additional forms of the same brand name (cigarettes, advert, billboard etc) occurred in the same five-minute interval the additional appearances were counted separately.				

### 4.3 Discussion

This study has shown that tobacco imagery, including episodes of tobacco branding, are commonly depicted in films popular in the UK, with 70% of the 300 films analysed containing at least one such tobacco episode. Tobacco branding appeared in 28 films; 9% of all the films content coded here. This study has also shown that the depiction of tobacco imagery and branding has decreased over the 20 years investigated, however tobacco imagery and tobacco

branding remain present in films, and remain present in films classified as suitable for young people to watch. However, within the lowest age classification category, Universal, the depiction of tobacco use images has ceased since 2000. The brands that have most commonly been displayed have been *Marlboro*, appearing a total 21 times, followed by *Silk Cut*, appearing a total of 14 times.

These findings, that tobacco imagery and brand appearances are commonplace in popular films, reflect the findings of several previous studies<sup>207-209 211 214 215 221 222 224 226 227</sup>. For example, Mekemson *et al*<sup>214</sup> found that 75% of the 497 films studied contained some tobacco imagery, Dalton and colleagues<sup>208</sup> found that 87% of the 250 films they investigated contained tobacco imagery, and Sargent *et al*<sup>226</sup> found in the 250 films they investigated that 85% contained tobacco use, as well as 28% of the films they investigated containing tobacco branding. These researchers found that the tobacco brands that appeared most frequently were *Marlboro* (40%) and *Winston* (17%). Brand appearances<sup>226</sup> have previously been defined similarly to that employed here. Our finding that 9% of the films viewed containing at least one tobacco episode of brand appearance is consistent with, though slightly lower than estimates from other studies, most of which explored earlier time periods<sup>207 208 211 214</sup> and in our data earlier time periods have shown occurrence to be higher.

As in this study, previous research from the US on individual brand appearances has also identified *Marlboro* to be the most commonly depicted brand<sup>226 227</sup>, and this perhaps reflects the fact that *Marlboro* is the market leader in the US, accounting for 42.4% of sales<sup>385</sup>. However *Silk Cut* holds only 5.2% of the UK market<sup>386</sup> and does not have a market share in the US, so whilst it is not surprising that the brand did not feature in any American film, the strong brand prominence of *Silk Cut* in two very popular UK films appears disproportionate. Whilst it can be argued that the use of *Silk Cut* was accurate brand translation

from book to film in *Bridget Jones's Diary*, that argument does not justify the brand prominence in *About a Boy*, where no tobacco brands were mentioned in the book on which the film was based.

There is however little consensus in previous studies as to whether tobacco and related imagery in film has increased<sup>211</sup>, stayed the same<sup>207</sup>, or decreased over time<sup>214</sup>. This study confirms a fall in the frequency of tobacco episodes in films popularly viewed in the UK from 1989 until 2008, and that exposure to tobacco use (but not to other tobacco related imagery) in U-rated films has ceased since 2000. This is both important and encouraging from the point of view of public health, however the previously reported decline in brand appearances over a similar period<sup>226</sup> may have affected predominantly adult-restricted films<sup>227</sup>. The number of brand appearances in our study was small, and although the decline in tobacco appearances in general has affected all films, brand appearances still persist in films rated suitable for viewing by children and young people.

It is likely that the differences in the results found in the different studies are due to differences in the methods use (see **Chapter 3**); different film samples, different sample sizes, different time periods covered, different coding methods employed, and differences in recording.

Here, five minute interval recording was used, and many previous researchers<sup>207 209 215 224</sup> have used this type of measurement<sup>348 349</sup> in the same manner as used here (detecting the presence or absence of events within each five-minutes of films viewed). Another study<sup>211</sup>, although viewed the data in five-minute intervals, additionally counted scene changes as separate incidents. Further researchers have used different measurements; such as Mekemson *et al*<sup>214</sup> who used interval recording for each minute of film; Dalton *et al*<sup>208</sup>, Worth *et*

*a*<sup>222</sup>, and Hanewinkel *et al*<sup>74</sup> measured by scene; and others<sup>221 226 227</sup> used methods of continuous measurement.

Dalton *et al*<sup>208</sup> have criticised five-minute interval recording methods by arguing that it does not allow for correspondence between scenes or meaningful blocks of time to occur, minimising the ability to code contextual factors effectively. However, the purpose of this research has been primarily to describe the pervasiveness of episodes and appearances in films and not to investigate the specific contextual details of each episode within the narrative of the film. Another potential criticism of this method is that the absolute duration of the observed behaviour cannot be established<sup>348 368</sup>. As the frequency of behaviour occurrences was the main characteristic of interest here this method was therefore considered appropriate for use. Furthermore, these methods have been previously validated by earlier researchers in this area<sup>207 209 215 224</sup>, and are easily replicable<sup>208</sup>. Given that the focus is to observe and record film content with the intention of comparing findings across films, there needs to be a set measurement unit across all films, such as five-minute intervals, as this allows for consistency across the films. Terre *et al*<sup>210</sup> argue that time sampling methods in these circumstances are preferred because smoking (behaviour of interest) is continuous rather than discrete (e.g. inhaling several times on the same cigarette in the same scene), and neither frequency nor duration recording is appropriate as they would overestimate the occurrence.

Although this study has been the first to look at trends over time in tobacco imagery, including a wide range of tobacco paraphernalia and inference, and specific brand appearances, in films most popular with UK audiences, the results show that tobacco imagery in films popularly viewed in the UK regularly occurs. The results here show, like in other countries, tobacco imagery and tobacco branding are commonly depicted in popular films, that tobacco branding

remains present in films, even those considered as suitable for viewing by children and young people.

## **Chapter 5: Alcohol in film results**

## 5.1 Information on films

Episodes of alcohol appearances were recorded for the same 300 films (see **appendix 1**) as were recorded for tobacco episodes (see section **4.1 Information on films** for details).

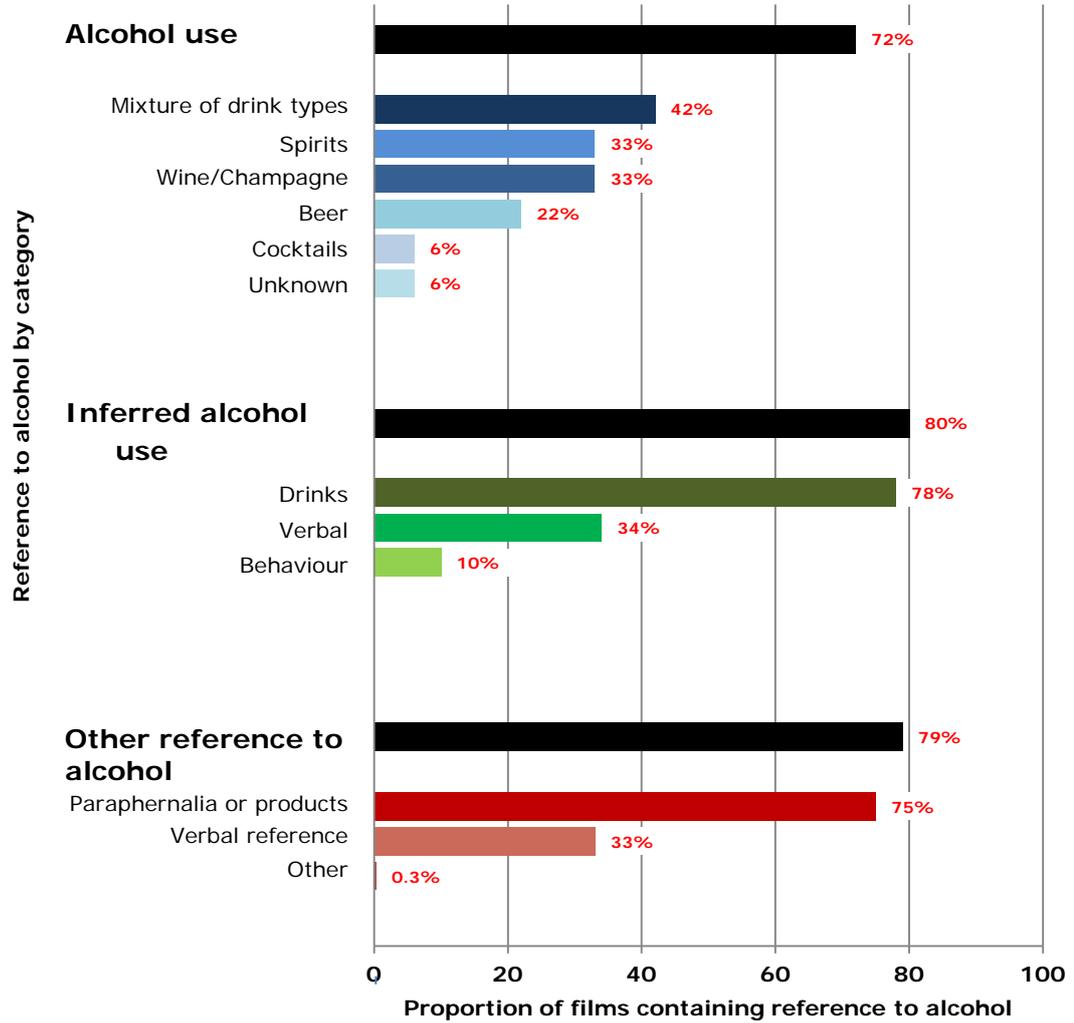
## 5.2. Alcohol results

### 5.2.1 All alcohol episodes

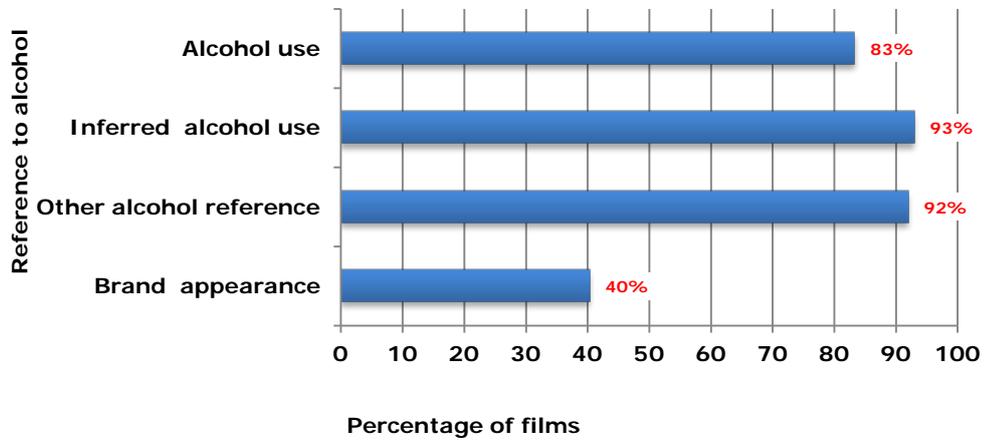
Of the 300 films investigated, 258 films (86%) contained at least one reference to alcohol, and 104 (35%) contained at least one episode of alcohol brand appearance. Of the 300 films, actual alcohol use occurred in 215 (72%; 215/300), implied alcohol use in 239 (80%; 239/300) and other reference to alcohol in 237 (79%; 237/300), see **figure 5.1**. Of the 258 films that contained some reference to alcohol, 215 (83%; 215/258) contained alcohol use, 239 (93%; 239/258) contained inferred alcohol use, 237 (92%; 237/258) contained other reference to alcohol, 104 (40%; 104/258) and contained brand appearances (**figure 5.2**).

Of the 6,994 five-minute intervals contained in all the films, 1,601 (23%) contained at least one reference to alcohol, (actual use – 851 (12%), inferred alcohol use – 1,320 (19%), or other reference to alcohol – 1,083 (15%), and 248 (4%) contained at least one alcohol brand appearance) (**figure 5.3**).

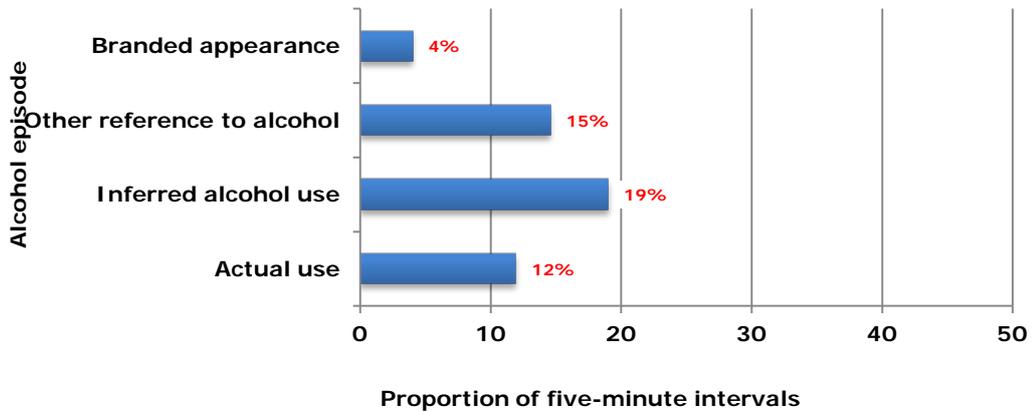
**Figure 5.1:**  
**proportion of films containing reference to alcohol by category**  
**(n=300)**



**Figure 5.2:**  
**Proportion of films containing reference to alcohol, by alcohol episode category: (n=258)**

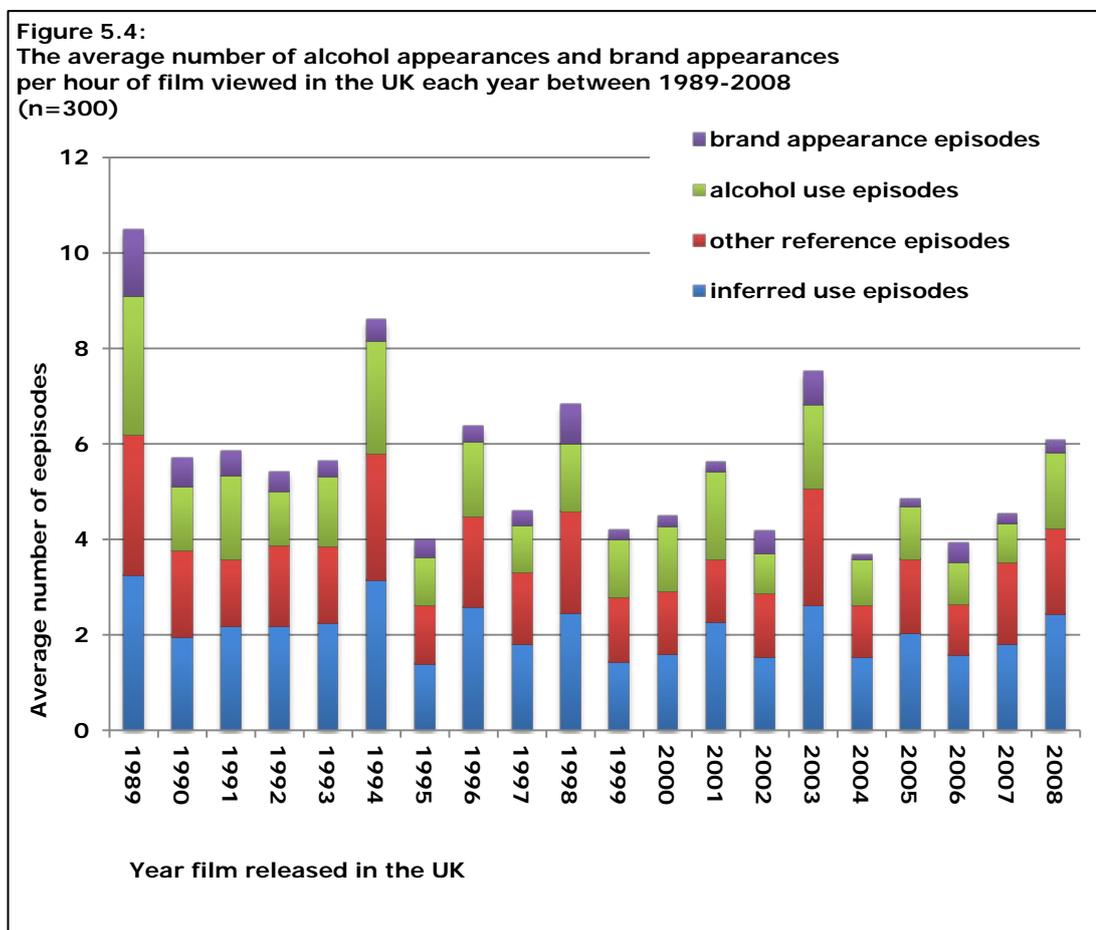


**Figure 5.3:**  
**Proportion of all five-minute intervals containing alcohol episodes: (n=6,994)**



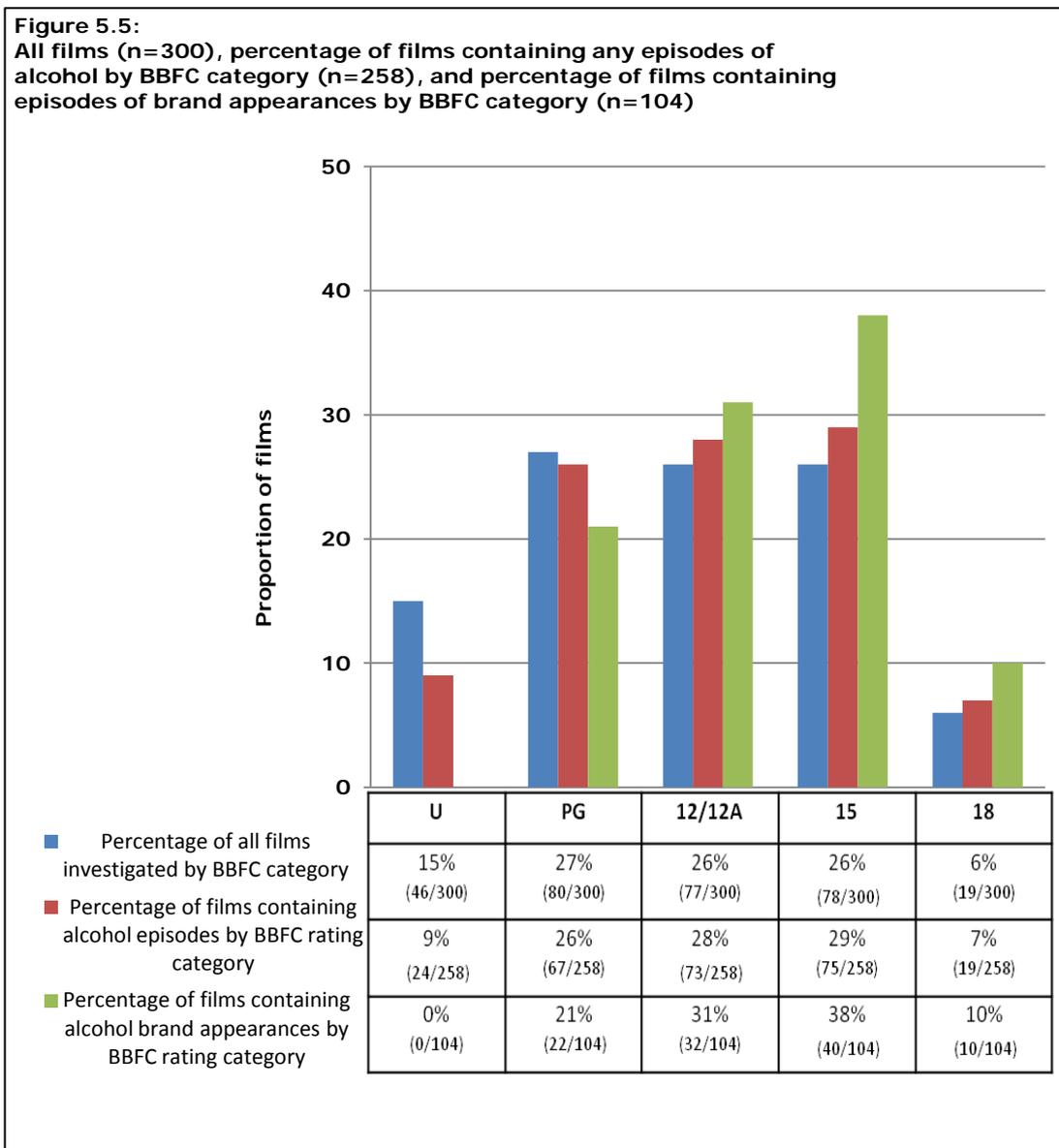
The mean number of episodes when all categories of alcohol episodes were combined (alcohol use, inferred or implied use, other alcohol reference and branding appearances) per film was 2.74 (Interquartile range (IQR): 0.8-4.0) per hour. The hourly count of alcohol episodes by year is plotted in **figure 5.4** which shows that there is a decreasing significant trend ( $p < 0.05$ ) over the 20

year period for all alcohol episodes in films when combined (alcohol use, inferred alcohol use, other alcohol reference and brand appearance). For each of the individual categories, although the trend remained negative it was significant ( $p < 0.05$ ) only for branded alcohol appearances and alcohol use. However, when 1989 was discounted from the analysis of branded alcohol appearances and alcohol use, both of these trends in average hourly counts of alcohol use and branded alcohol appearances became non-significant.



The majority of alcohol appearances (85%; 239/281) occurred in films classified by the BBFC as suitable for children and young people to watch (films rated as 15 and lower classification categories). At least one alcohol appearance

occurred in 52% (24/46) of U-rated films, 84% (67/80) of PG, 95% (73/77) of 12/12A, 96% (75/78) of 15, and in all (100%; 19/19) 18-rated films. Although there were no brand appearances in any Universal rated films, 90% (94/104) of all brand appearances occurred in films categorised as suitable for viewing by people under 18 years of age, and were particularly common in BBFC 12/12A and 15 categories (Chi<sup>2</sup>=49.07, p<0.05, **figure 5.5**).



### 5.2.2 Alcohol use

Actual alcohol use coded by type; beer, wine or champagne, spirits, cocktails, mixture of drink types, and type unknown appeared 851 times in 215 (72%; 215/300) of the films studied. Of the 851 times that alcohol use was depicted, mixture of drink types (e.g. several people shown drinking different types of drinks within the same five minute interval, see **figure 5.6**) appeared in the greatest number of intervals (36%; 307/851). A mixture of drink types also appeared in the greatest number of films (57%; 123/215). Cocktails were evident in the least number of five-minute intervals (3%; 28/851) and in a small minority of the films containing alcohol use (9%; 19/215), wine or champagne was the most common single type product consumed onscreen, see **table 5.1** below. Less than 30% of films contained no alcohol use episodes (28%; 85/300).

<b>Table 5.1: Proportion of all films (n=258), and five-minute intervals (n=851) that contain alcohol use episodes by category</b>		
<b>Alcohol use category</b>	<b>Proportion of films</b>	<b>Proportion of alcohol use episodes</b>
<b>Beer</b>	<b>31%</b> (66/215)	<b>13%</b> (113/851)
<b>Wine or champagne</b>	<b>47%</b> (100/215)	<b>22%</b> (193/851)
<b>Spirits</b>	<b>47%</b> (100/215)	<b>21%</b> (182/851)
<b>Cocktails</b>	<b>9%</b> (19/215)	<b>3%</b> (28/851)
<b>Mixture of drink types</b>	<b>57%</b> (123/215)	<b>36%</b> (307/851)
<b>Type unknown</b>	<b>8%</b> (17/215)	<b>3%</b> (28/851)

**Figure 5.6:**

**Example of actual alcohol use in films**

Two men drinking glasses of scotch in *The Day After Tomorrow*.



Young man drinks beer with friends in *The Beach*



Dr Malcolm Crowe (*Bruce Willis*) drinks a glass of red wine in *The Sixth Sense*



Mixed drinks types being consumed by several people in a party scene from *American Pie 2*



**5.2.3 Inferred alcohol use**

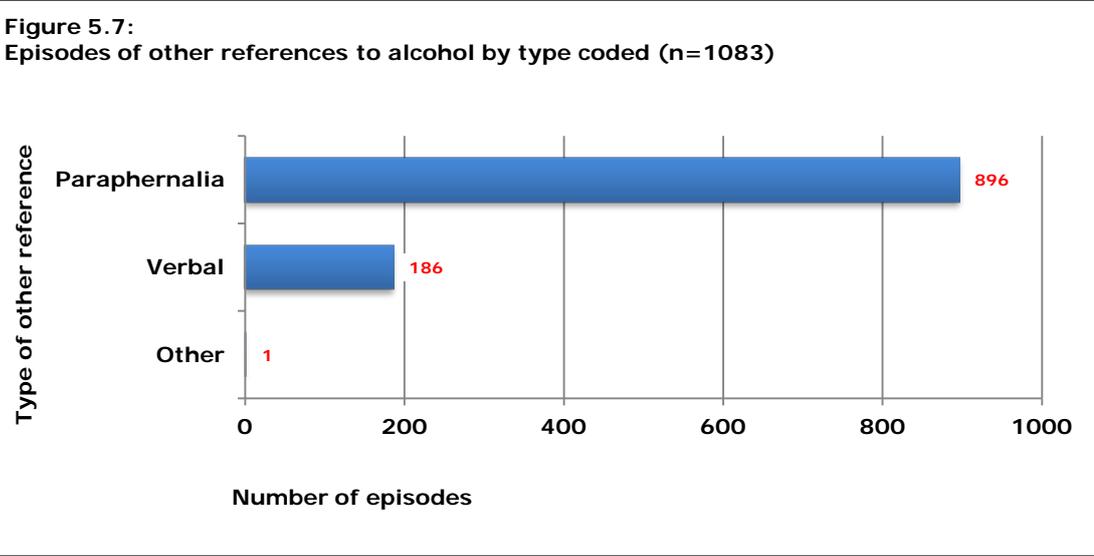
Inferred alcohol use occurred 1,320 times in 239 (80%; 239/300) of the films, and was coded by the visibility of a drink(s) (but not consumption), verbal reference (relating to current use), or behaviour (such as drunkenness). **Table 5.2**, below, shows the proportion of films that contained at least one episode of inferred alcohol use, and the proportion of five-minute intervals that contained inferred alcohol use.

**Table 5.2:**  
**Proportion of films (n=239), and five-minute intervals (n=1320) that contain inferred alcohol use episodes by category**

Inferred alcohol use category	Proportion of films	Proportion of inferred alcohol use episodes
Visible drinks (but not consumption)	98% (234/239)	85% (1118/1320)
Verbal reference	42% (101/239)	12% (159/1320)
Behaviour	13% (30/239)	3% (43/1320)

**5.2.4 Other alcohol reference**

Episodes of other alcohol reference were found to be present 1083 five-minute intervals in 237 (79%; 237/300) films. These episodes were coded by the presence of paraphernalia (e.g. bottles visible in the background of a scene), verbal reference (but not relating to current use) or other (**figure 5.7**). Other reference was only coded once and this was for a diary entry shown on-screen relating to Bridget Jones’s earlier alcohol consumption in the film *Bridget Jones’s Diary* (BBFC 15, 2001)<sup>379</sup>, but not relating to current use (**figure 5.8**).



Of the 237 films and 1083 five-minute episodes that contained other reference to alcohol, the proportion of films that contained at least one episode of other reference to alcohol, and the proportion of five-minute intervals that contained other reference to alcohol are shown in **table 5.3**. Other reference to alcohol was predominantly non-verbal (paraphernalia, products, behaviour; 95%), compared with verbal (42%).

**Figure 5.8:**  
Diary entry shown onscreen in the film *Bridget Jones's Diary*

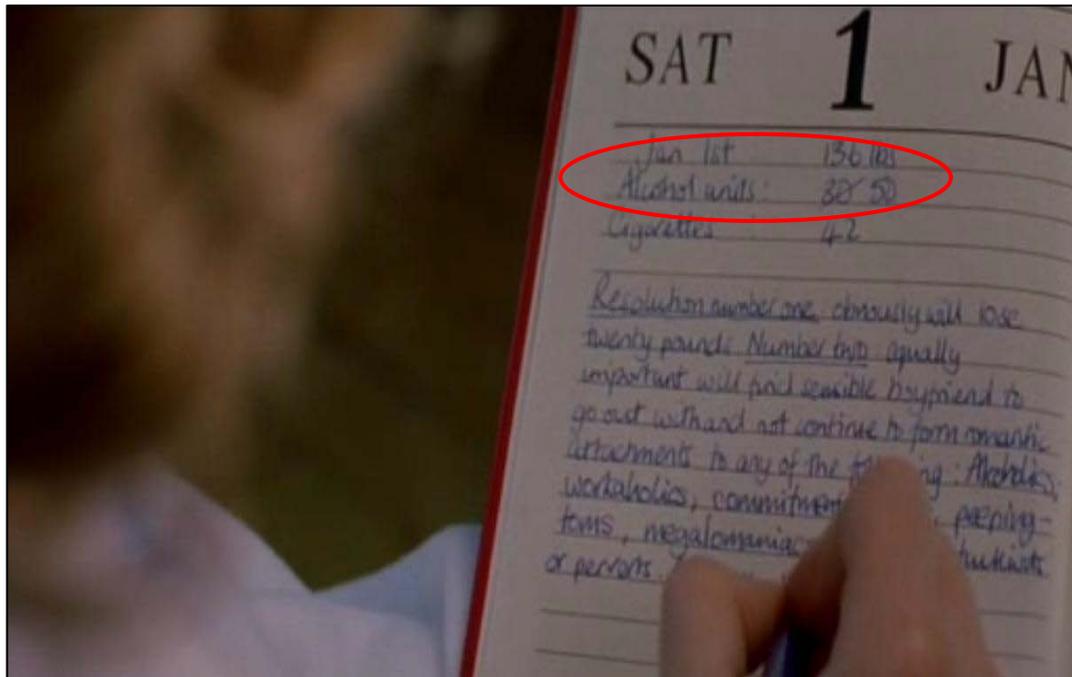
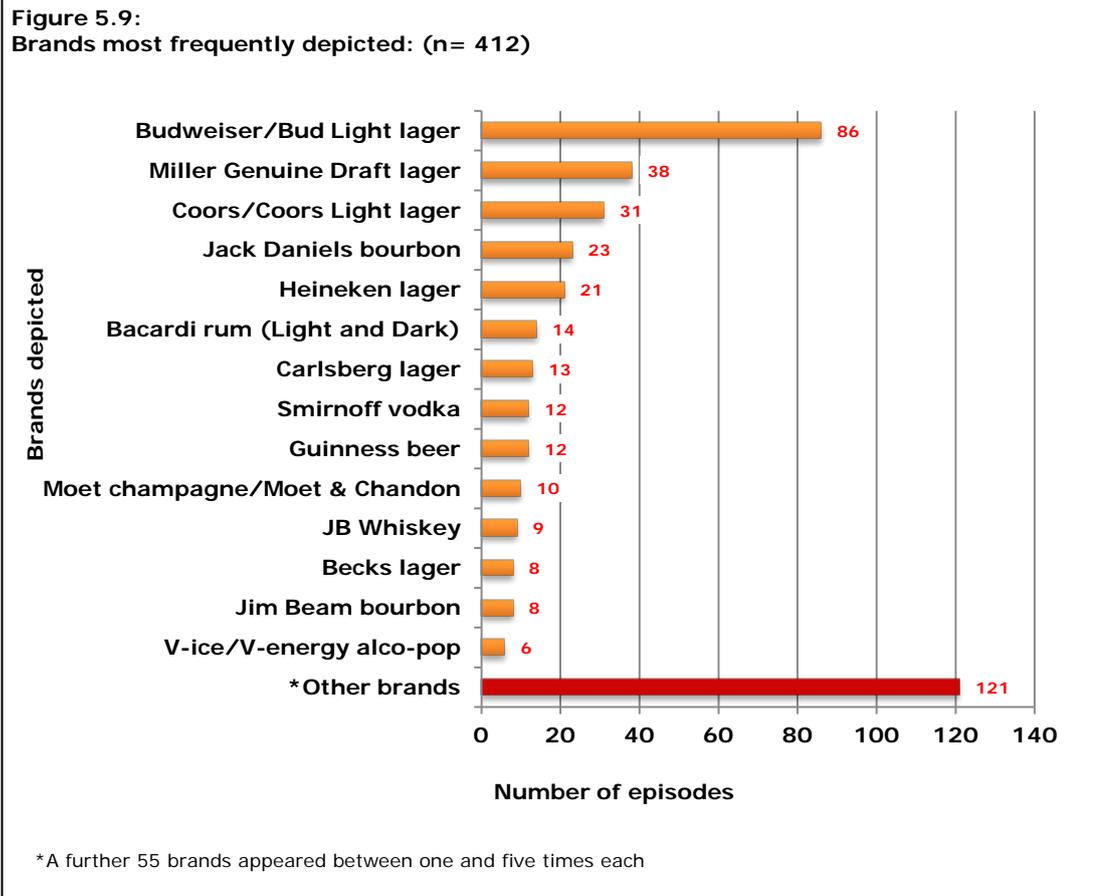


Table 5.3: Proportion of films (n=237), and five-minute intervals (n=1083) that contain other reference to alcohol episodes by category		
Other reference to alcohol category	Proportion of films	Proportion of inferred alcohol use episodes
Paraphernalia or products	95% (224/237)	83% (896/1083)
Verbal reference	42% (99/237)	17% (186/1083)
Behaviour	4% (1/237)	0.09% (1/1083)

### 5.2.5 Brand appearance

Brand appearances occurred 412 times in 248 five-minute episodes (4% of the total; 248/6994) and were present in 104 (35%; 104/300) films. A total of 69 separate alcohol brands were visible, the top three most frequently depicted brands were the US beer brands: *Budweiser* or *Budweiser Light* which appeared 86 times (21%; 86/412) in total, followed by *Coors* or *Coors Light* (31 (8%; 31/412) times) and *Miller Genuine Draft* or *Miller Light* (28 times (7%; 28/412)). *Budweiser* and *Miller* brands accounted for 30% (114/412) of all appearances of branding. The most frequently depicted brands are shown in **figure 5.9**.



The majority of brand appearances occurred in films originating from the US. Of the 104 films containing some alcohol branding, 98 were either solely or partly US productions, and 22 solely or partly UK productions. There was no significant difference in the proportions of films with brand appearances from the UK (0.37) and the US (0.35) in relation to brand appearances in all films with UK involvement (22/59) and US involvement (98/281). Of the films that contained branding 16 films were produced by companies from both the UK and the US, and were therefore considered in both UK and US categories.

Two brands *Duff beer* (*The Simpsons Movie*, 2007)<sup>387</sup> and *Penn Paveis beer*, *The Truman Show*, 1998)<sup>388</sup> were fictitious brands, and one brand, *Kina Lillet* (*Casino Royale*, 2006)<sup>389</sup>, a wine, has not been produced since 1985 but

featured in the original text of the book by Ian Fleming (p 45)<sup>390</sup> (see **figure 5.10**).

<b>Figure 5.10:</b> <b>Excerpt from <i>Casino Royale</i> original text by Ian Fleming</b>
Page 45 –  <i>“Just a moment. Three measures of Gordon’s, one of vodka, half a measure of Kina Lillet. Shake it very well until it’s ice-cold , then add a large thin slice of lemon peel. Got it?”</i>

The film with the greatest intensity of a particular brand was *See no evil, Hear no evil* (1989, Comedy, BBFC 15, US)<sup>391</sup> in which *Budweiser* appeared 13 times (see **figure 5.11** for examples). The branding was evident in several bar scenes, and included branded neon signs and bottles of beer. The film where the greatest number of separate brands were shown was *Cocktail* (1989, Comedy, BBFC 15, US)<sup>392</sup> (see examples in **figure 5.12**) where 15 separate brands were depicted a combined 39 times. These brands (and the number of times they appeared) were; *Disaronno Amaretto* (4), *Kahlua* (4), *Bacardi* (white) (6), *Bacardi* (dark) (2), *Lite beer* (5), *Absolute* (1), *Gilbey’s* (1), *Velvet Hammer* (1), *Molson Golden* (2), *Jim Beam* (5), *Martini* (2), *Miller Genuine Draft* (3), *J & B* (2), and *Tia Maria* (1).

Figure 5.11:

**Examples of Budweiser branding in film *See no evil, hear no evil***

Budweiser branded neon sign behind a bar



Bud branded neon sign on the doorway in the background of a bar



Budweiser branded sign in the background of a bar scene



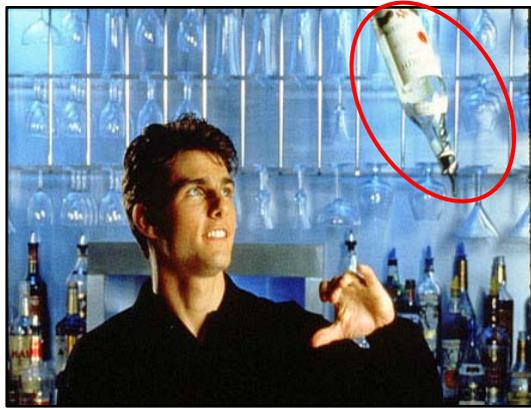
Budweiser branded beer bottle in the hand of a man in the background



Figure 5.12:

**Examples of alcohol branding in film Cocktail**

Bacardi branded bottle being tossed by *Brian Flanagan* (Tom cruise)



Bar scene, various brands identifiable in the background behind *Brian Flanagan* (Tom cruise)



Verbal reference to Jim Beam in busy bar scene



Bacardi branded bottle of rum in *Doug Coughlin's* (Bryan Brown) hand



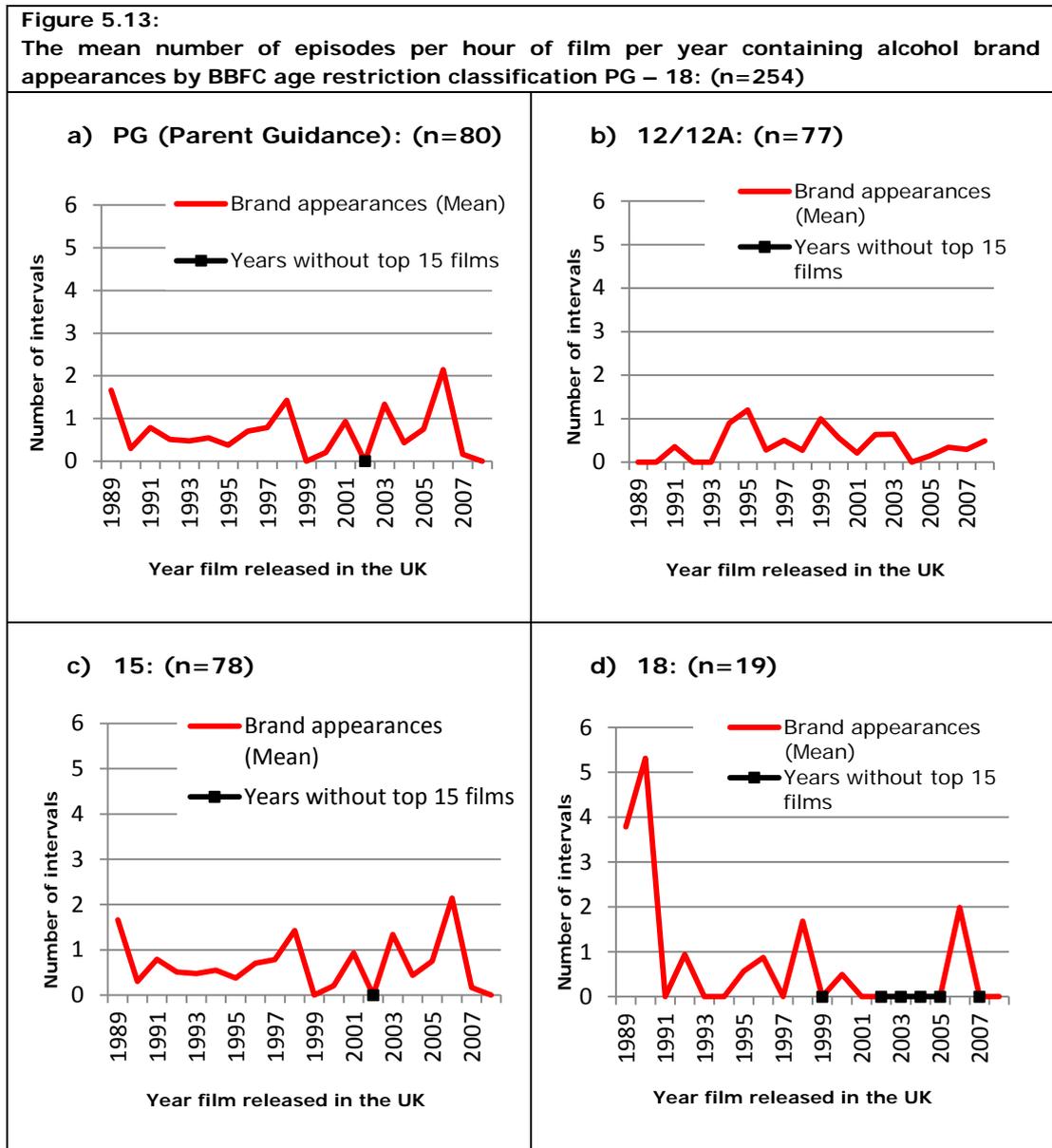
Miller and Lite beer advertising signs on bar wall in front of *Brian Flanagan* (Tom cruise)



Red stripe bottles visible in bar scene, *Brian Flanagan* (Tom cruise) and *Jordan Mooney* (Elisabeth Shue)



The mean number of *brand appearances* per hour of film per year in BBFC age classifications PG to 18 (n=254 films) are shown in **figure 5.13**, which demonstrates that with the exception of 18-rated films, in which there was a high frequency of brand appearances in the early years of the study period, there was little change in frequency in all other film classifications.



### 5.3 Alcohol in film discussion

Most films contained some reference to alcohol (86%), and over a third (35%) contained images of alcohol branding. Overall episodes of alcohol in films fell slightly over the 20 years investigated, although not if 1989 was excluded which had an unusually high number of alcohol episodes. The majority of alcohol appearances were contained in films classified by the BBFC as suitable for children and young people to watch. Even though there was no evidence of any branding in any of the BBFC Universal classified films, almost all of the films that did contain branding (90%) were films that were BBFC rated as suitable for children and young people to view, and branding was particularly evident in BBFC 12/12A and 15 classification categories, and with the exception of adult rated films (BBFC 18) little has changed in the frequency of brand depictions over the years investigated. Episodes containing multiple types of drinks (coded as mixed drink types) made up the majority of alcohol use episodes (57%), the most commonly depicted single category of drink was coded as wine or champagne (in 47% of films that contained alcohol use), the visibility of drinks made up the majority of inferred use episodes (98%), and other reference to alcohol was predominantly non-verbal (95%) compared with verbal (42%). The most commonly depicted brands were *Budweiser* and *Miller* brands accounting for nearly a third of all branded episodes. Although the majority of branding appeared in films produced in the US; neither UK nor US films were more likely than the other to contain branded episodes.

Previous studies, from other countries, have found similarly high proportions of films contain alcohol appearances<sup>179 209 210 218 219 251 254</sup>. One study from the US undertaken by Roberts *et al*<sup>254</sup>, found that alcohol appeared in 93% of the 200 most popular films for video rental in 1996 and 1997, Hanewinkel *et al*<sup>179</sup> found that alcohol appeared in 88% of the 398 films selected from top-

grossing films in the German box office covering the years between 1994 to 2004, another US study carried out by Everett and colleagues<sup>209</sup> found that 96% of the 110 popular films they included contained some reference to alcohol. Sargent *et al*<sup>251</sup> found that 92% of the 601 popular films at the US box office that they investigated from 1988-1997 contained alcohol.

Previously studies have also found alcohol use predominant in films aimed at children and young people. Goldstein *et al*<sup>218</sup> and Thompson and Yokota<sup>219</sup> have shown that even US G-rated (comparable to UK BBFC Universal classified films) children's animated films contained alcohol use in about 50% of the films they each investigated. Goldstein *et al*<sup>218</sup> also found that wine was commonly depicted in films. Terre *et al*'s study<sup>210</sup> of 200 popular films 1977-1988 found that alcohol use was more common in youth rated than adult rated films.

Like Goldstein *et al*<sup>218</sup> and Thompson and Yokota<sup>219</sup> we also found that alcohol occurs frequently in youth rated films, however, unlike Dal Cin *et al*'s study<sup>255</sup> who found that branding was present in all age categories of films, we did not find any evidence of branding in the lowest age classification category (BBFC Universal). Thompson and Yokota<sup>219</sup> also found a reduction in the number of alcohol use depictions over the study period (1937 to 2000) even though the study time periods were different. Terre *et al*'s<sup>210</sup> found that alcohol use was more common in youth rated than adult rated films. Our results, although there's a different rating system in the UK, we found alcohol imagery to be extremely common in all categories of age classification of films popular in the UK. Similar to my study, Dal Cin *et al*'s study<sup>255</sup> showed that alcohol use was present in 83% of films and the brands most commonly depicted in all age rating categories of films in their sample of 134 top-grossing films in the US from 1998 until the early part of 2003 were *Budweiser* and *Miller*. In our study, American

beer brands were the most commonly depicted alcohol brands, particularly *Budweiser* and *Miller*.

As the same recording methods were used for recording both tobacco and alcohol content in film (five-minute interval recording), the same rationale and limitations apply to the recording methods of alcohol as tobacco (see **section 4.3**). This method has been found to accurately measure the frequency of behaviour occurrences<sup>348 368</sup>, and these methods have been previously validated by earlier researcher in the area of alcohol in film<sup>209 210 254</sup>.

As with many of the previous studies that investigated alcohol occurrence in film<sup>179 209 210 218 219 251 254</sup>, our study showed that alcohol was commonly depicted, although the small differences that exist are probably due to sampling differences (e.g. films included, size, and years covered). After intervals that contained several different types of drinks, wine was the most commonly shown, this is consistent with Goldstein *et al*<sup>218</sup> finding that wine was commonly depicted in films.

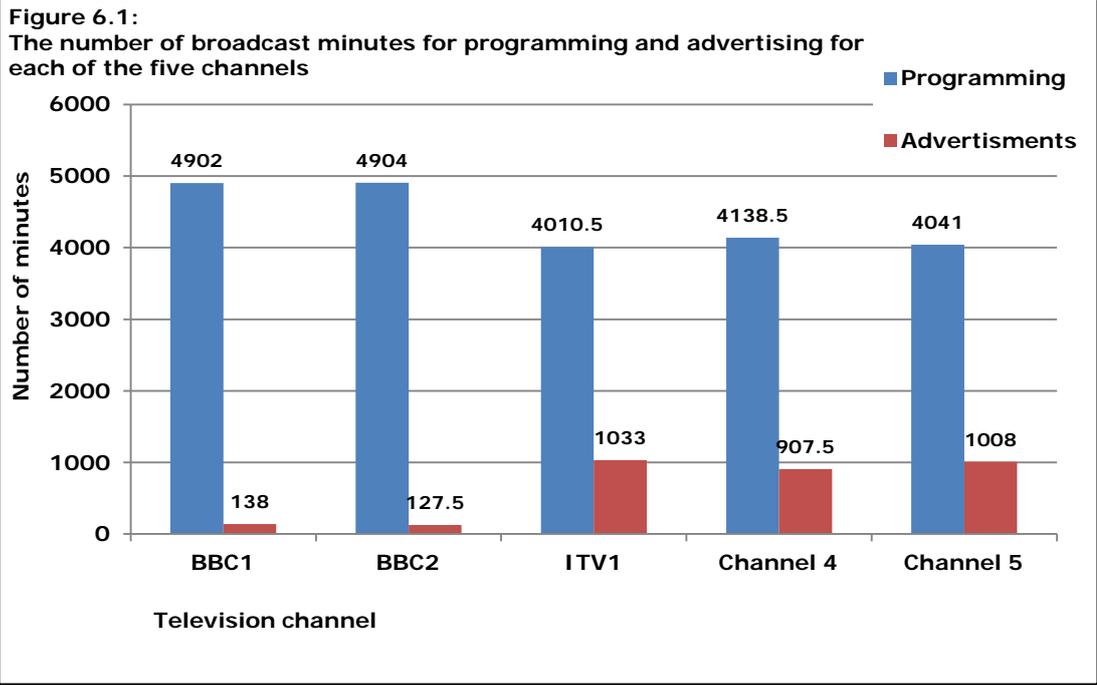
In view of the evidence that this type of exposure can influence young people's behaviour<sup>393-395</sup>, and the evidence of an association between exposure to alcohol in films to uptake and subsequent use of alcohol among young people<sup>178 179 182 251</sup>, these findings identify a highly important, and entirely avoidable, influence on current and future alcohol consumption by young people in the UK.

## Chapter 6: Tobacco on television

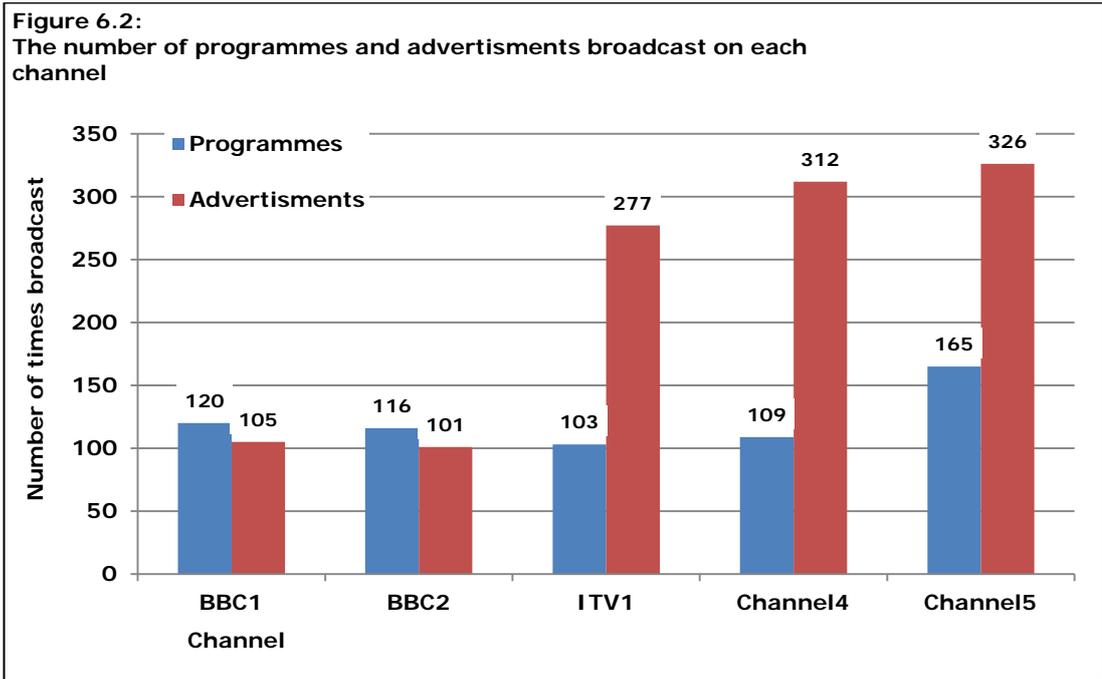
## 6.1 Information on television programmes

Three weeks of television recording from 6-10pm each day Monday to Sunday for five channels produced 140 hours each week, and in total, 420 hours of television broadcasting. This equated to 23,015 full one-minute intervals recorded, 2,200 part one-minute intervals recorded, and 25,215 combined minutes of television broadcast (full- and part- one minute intervals combined). There was one period lasting five minutes on BBC2 where no broadcasting was made due to a technical problem. The total number of broadcasting minutes analysed was therefore 25,210.

These 25,210 minutes of broadcasting comprised 21,991 minutes of programmes (including films), and 3,214 minutes of advertising/trailers (see **figure 6.1**). There were more minutes of advertising/trailers on the three commercial channels (ITV1, Channel4, and Channel5), compared to the non-commercial channels (BBC1 and BBC2). The largest number of advertising minutes were broadcast on ITV1 (1,033mins), followed by Channel 5 (1,008mins), Channel 4 (907.5mins), and the BBC channels had relatively few advertising minutes broadcast, BBC1 (138), and BBC2 (127.5).

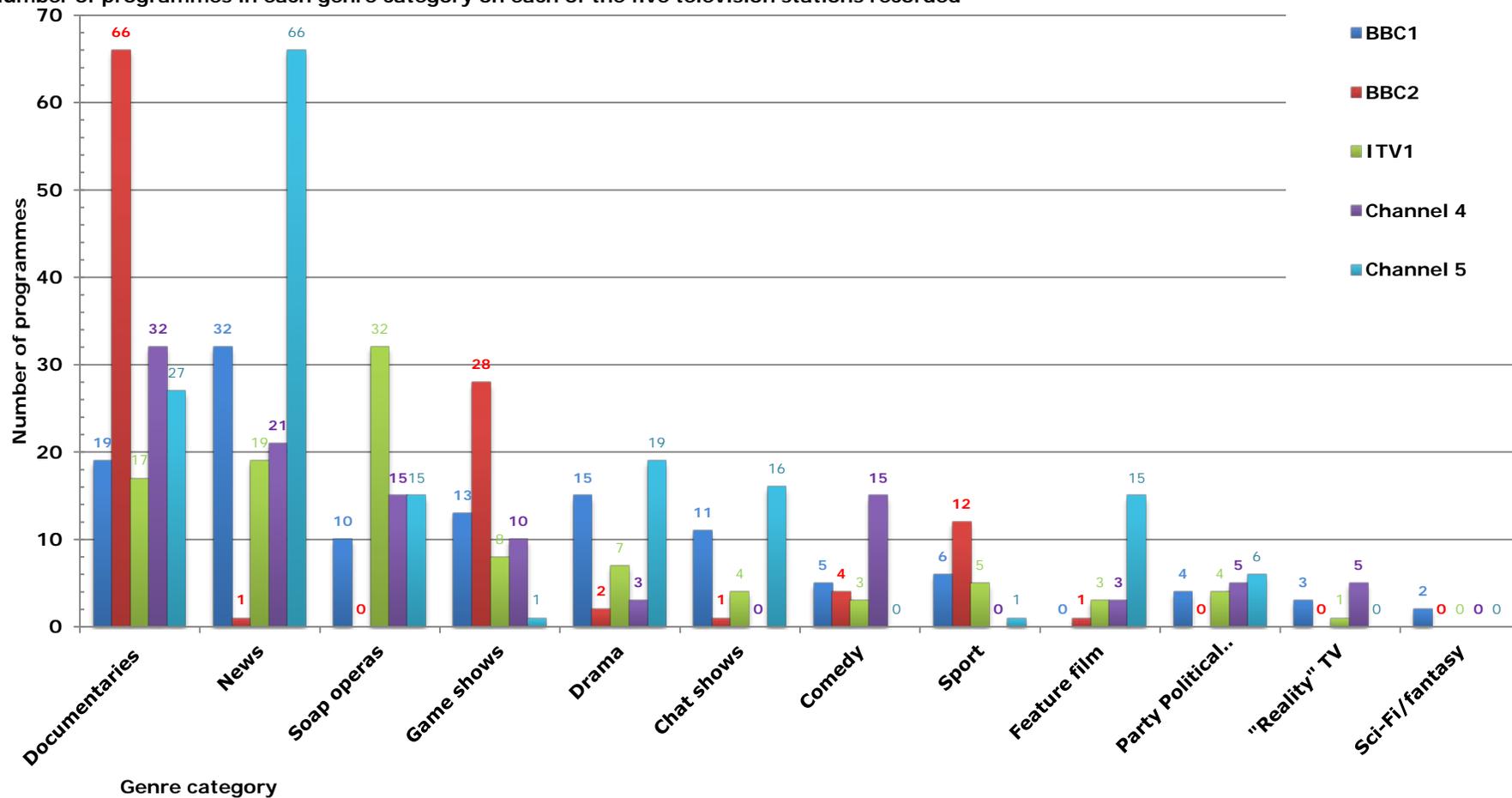


There were a total of 613 programmes and 1,121 advertisements/trailers broadcast. The greatest number of programmes was shown on Channel 5 (165), followed by the BBC1 (120), and BBC2 (116). Channel 4 showed 109, and ITV showed 103 (see **figure 6.2**). The greatest number of adverts/trailers were shown on Channel 5 (326), followed by Channel 4 (312), and ITV (277). Again the BBC channels aired relatively few (BBC1 105, and BBC2 101, see **figure 6.2**).



Of the 613 programmes broadcast, the most common genre was documentaries (161), followed by news (139), soap operas (72), game shows (60), drama (46), chat show (32), comedy (27), sport (24), feature film (22), party political broadcasts (19), reality TV (9), and sci-fi/fantasy (2). However this varied by channel, see **figure 6.3**.

Figure 6.3:  
Number of programmes in each genre category on each of the five television stations recorded



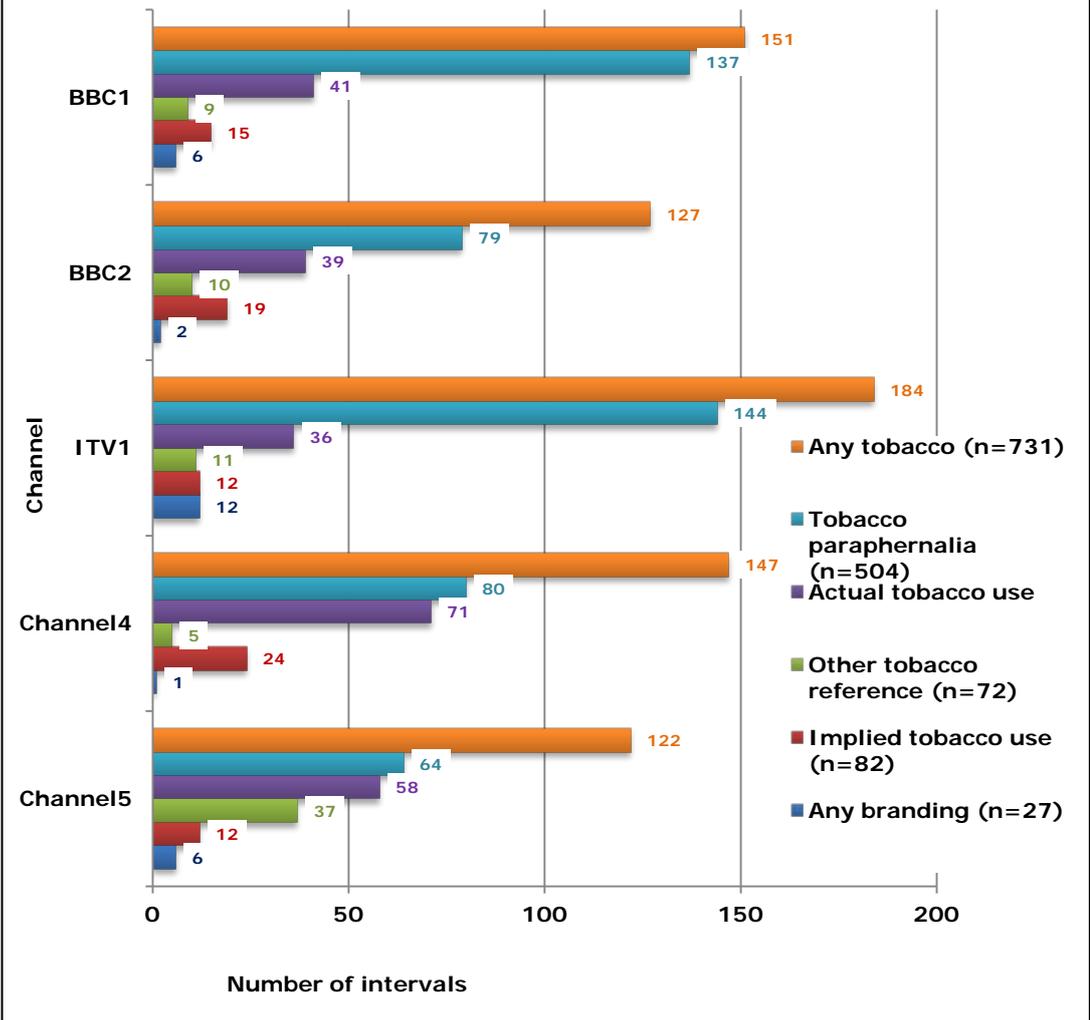
As well as being the genre to appear most frequently, documentaries also made up the greatest amount of broadcasting time (6,934.5mins), followed by news (2,862mins), drama (2,249.5mins), sport (2,169mins), game shows (2,097mins), soap operas (1,824.5mins), feature films (1,461.5mins), chat shows (1163mins), comedy (699.5mins), reality TV (381.5mins), sci-fi/fantasy (84.5mins), and party political broadcasts (70mins).

## **6.2 Tobacco results**

### ***6.2.1 All tobacco episodes***

All tobacco episodes, categorised as any tobacco content was contained in 731 intervals (2.9% of total; 731/25210). This proportion was highest on ITV1 (3.6%; 184/5043.5) and lowest on Channel 5 (2.4%; 122/5049) [ $\text{Chi}^2=16.9$ ,  $p<0.05$ ], and for the most part comprised tobacco paraphernalia (**Figure 6.4**). Of the 613 programmes broadcast (21,991 minutes), 210 (34%) contained any tobacco, occurring in 699 (3.2%; 699/21991) one-minute intervals. This ranged from 2.3% (BBC2; 112/4899) to 4.4% (ITV1; 179/4010.5), and varied between all channels,  $\text{Chi}^2=36.0$ ,  $p<0.05$ ).

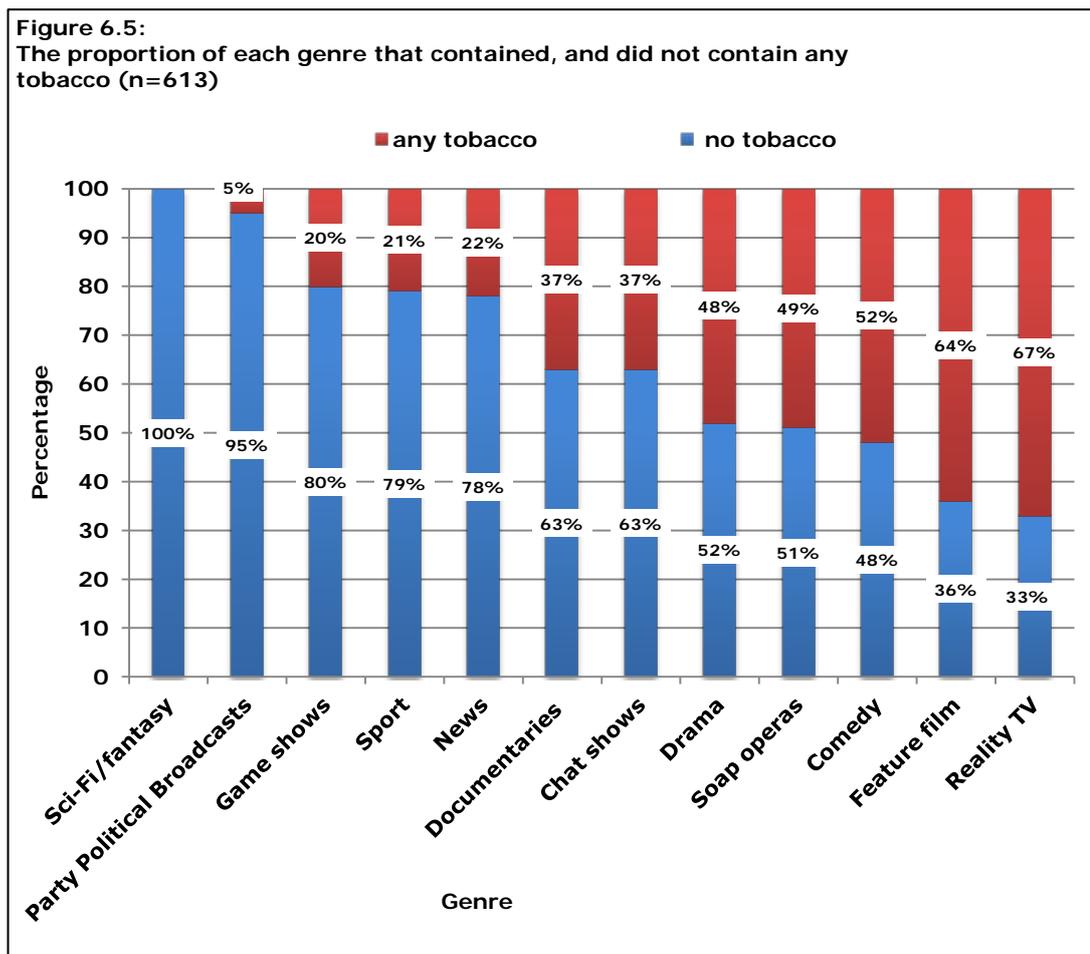
**Figure 6.4:**  
**Number of one-minute intervals that contain any tobacco on each channel, by coded category**



Tobacco content also differed significantly between genres ( $\chi^2=230$ ,  $p<0.05$ ), occurring in more than half of all reality TV, feature films and comedy programmes (**Figure 6.5**). Of 1,121 advertisements/trailers analysed, 29 (2.6%) contained any tobacco, occurring in 32 of 3,214 one-minute intervals (1%). With the exception of advertisements for smoking cessation products this occurred almost entirely in programme trailers.

The majority of tobacco imagery observed (69%) was broadcast before the 9pm watershed. However, when taking into consideration that the majority

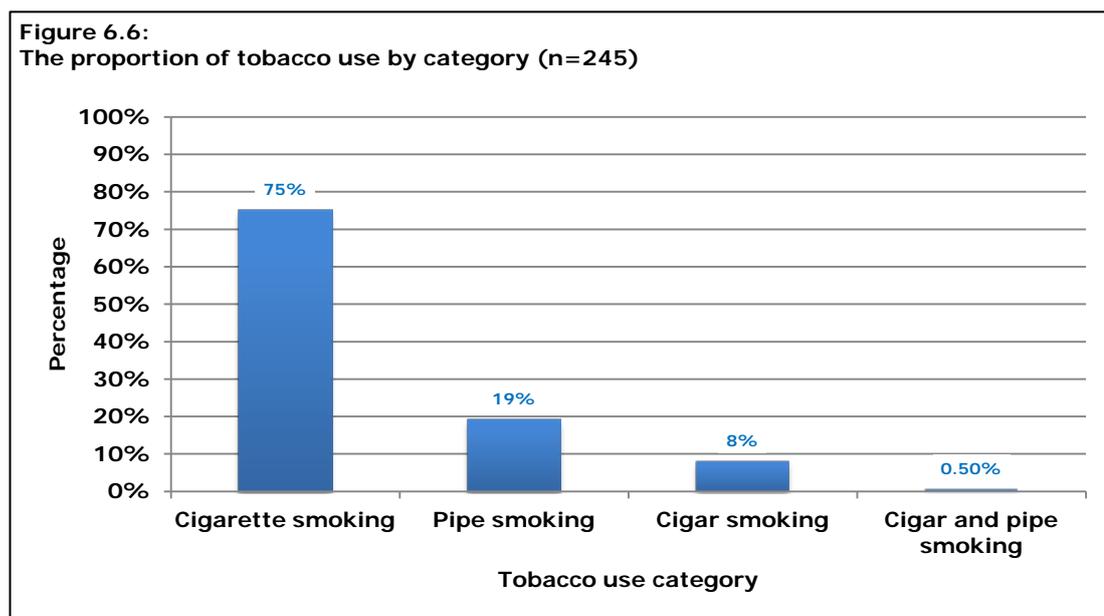
of the one-minute intervals recorded were broadcast before (19,024.5) compared with after (6,185.5) the watershed, a greater proportion of intervals containing any tobacco occurred after the watershed (3.65%; 226/6185.5) than before the watershed (2.65%; 505/19024.5). This difference was significant ( $\text{Chi}^2=16.5, p<0.05$ ).



### 6.2.2 Tobacco use episodes

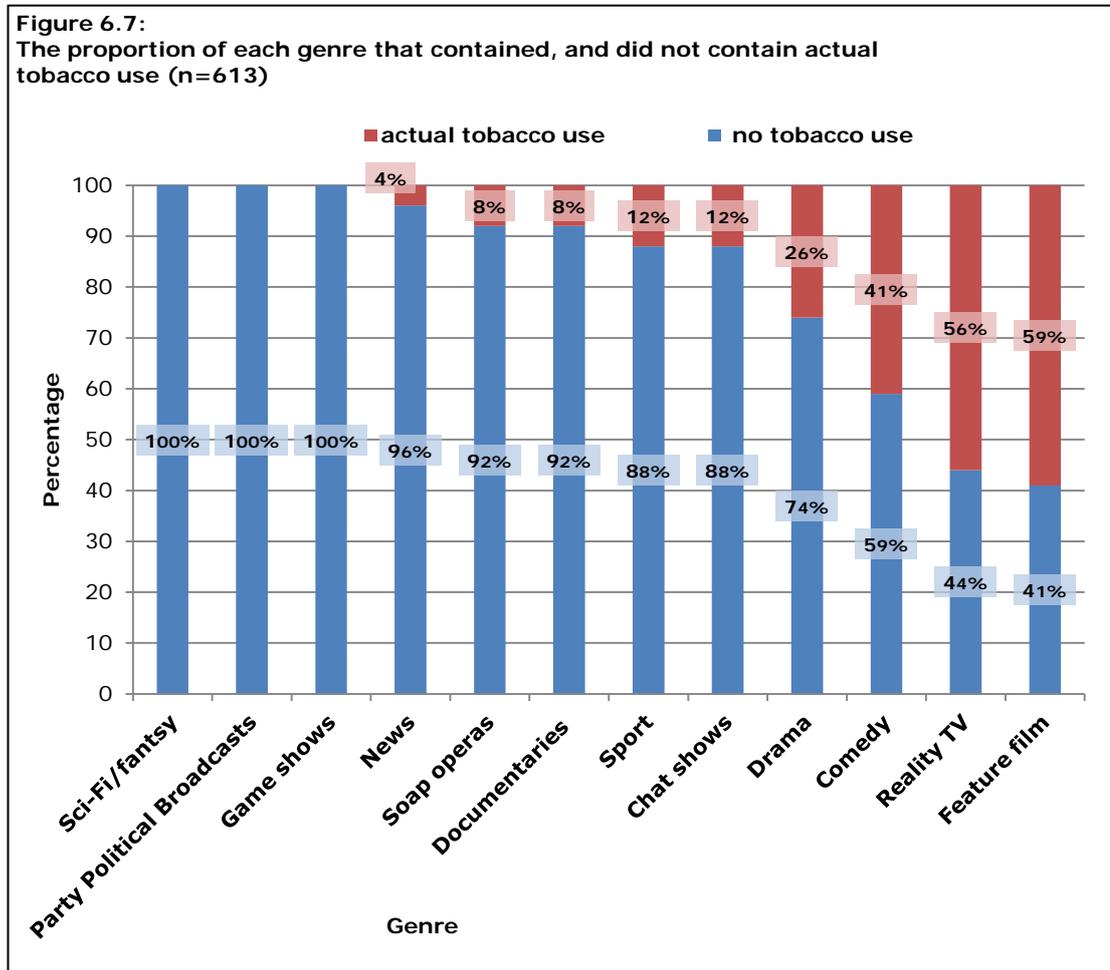
Tobacco use episodes, categorised as actual tobacco use, occurred in 245 (1%) of all intervals, in 73 (12%; 73/613) programmes and 7 (0.6%; 7/1121) advertisements/trailers, all of which were trailers on either *BBC1* or *BBC2*. Most

actual tobacco use appearances were of cigarette smoking, occurring in 183 one-minute intervals (75%; 183/245), followed by pipe (19%; 47/245) and cigar smoking (8%; 19/245), cigar and pipe smoking occurred together in one one-minute interval (0.4%; 1/245) (**figure 6.6**).



Actual tobacco use occurred in eight programme genres (**figure 6.7**), and in more than half of all feature films and reality TV. The 13 feature films that contained actual tobacco use are listed in **table 6.1**. Nine of these were broadcast on Channel 5, and nine at least in part before 9pm. The intervals that contained actual tobacco use most often occurred before the watershed (60%; 147/245), rather than after the watershed (40%; 98/245). However, when taking into consideration that the majority of the one-minute intervals recorded were broadcast before (19,024.5) compared with after (6,185.5) the watershed, a greater proportion of intervals containing actual tobacco use occurred after the watershed (1.58%; 98/6,185.5) than before the watershed (0.77%; 147/19,024.5). This difference was significant ( $\text{Chi}^2=31.95$ ,  $p<0.05$ ). Examples

of the actual tobacco use that has been shown on television are illustrated in figure 6.8.



**Figure 6.8:**

**Examples of actual tobacco use shown on television**

*Eddie Windass* (Steve Huison) is seen smoking a cigarette in *Coronation Street*



A man (unknown) smoking a cigarette in *Blitz Street*



*Steve McDonald* (Simon Gregson) smoking a cigarette in *Coronation Street*



Character in *Inspector George Gently* smoking a cigarette



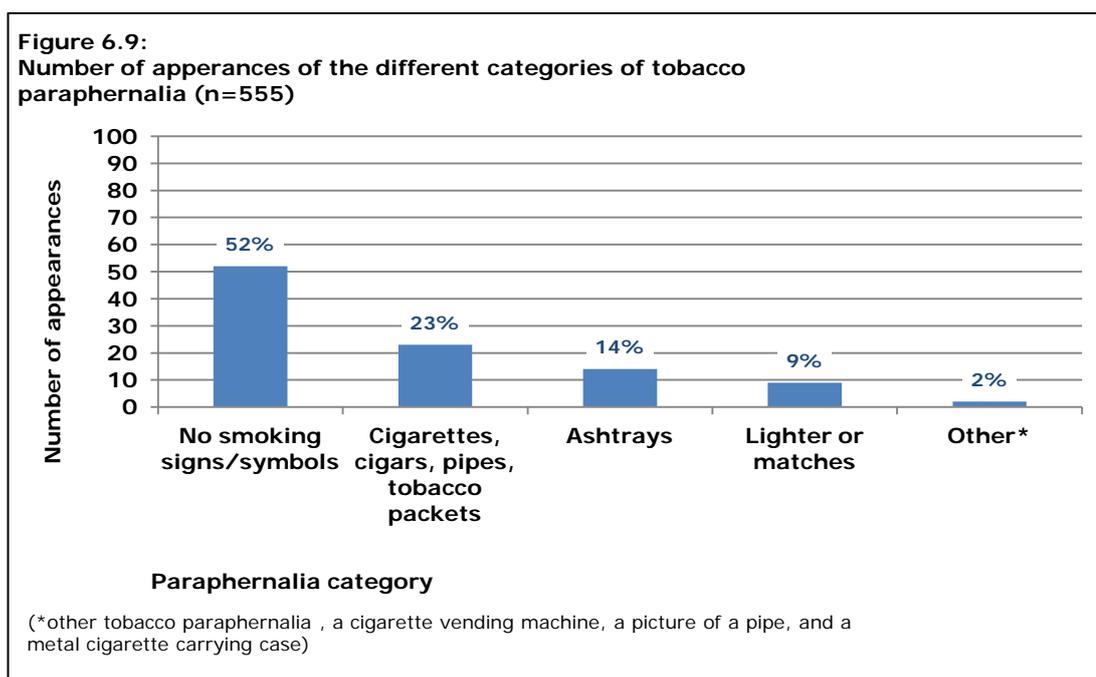
<b>Table 6.1:</b>							
<b>The feature films containing actual tobacco use (n=13)</b>							
<b>Channel</b>	<b>Title</b>	<b>Broadcast time *</b>	<b>pre-/post-watershed</b>	<b>Intervals</b>	<b>What use</b>	<b>BBFC rating</b>	<b>Branding</b>
<b>BBC2</b>	Chocolat	18:06-19:59	pre-	2	cigarette	12	n
<b>ITV1</b>	Johnny English	18:00-18:31	pre-	1	cigarette	PG	n
<b>Channel4</b>	Lord of the rings: the fellowship of the ring	19:00-22:00	pre- & post-	17	pipe	PG	n
<b>Channel4</b>	Borat	21:04-22:00	post-	1	cigarette	15	n
<b>Channel5</b>	Heartbreakers	21:03-21:54	post-	7	cigarette	15	n
<b>Channel5</b>	Practical Magic	20:01-22:00	pre- & post-	7	cigarette	12	n
<b>Channel5</b>	How the west was won	18:00-18:56	pre-	5	cigar	U	n
<b>Channel5</b>	Cradle to grave	20:01-22:00	post-	5	cigar	15	n
<b>Channel5</b>	Rooster Cogburn (and the lady)	18:03-19:11	pre-	5	cigarette (1) cigar (4)	U	n
<b>Channel5</b>	Secret window	21:01-22:00	post-	3	cigarette	12	y (L&M)
<b>Channel5</b>	My favourite Martin	18:00-18:59	pre-	2	cigarette	PG	n
<b>Channel5</b>	Message in a bottle	19:27-21:57	pre & post-	2	cigar	12	n
<b>Channel5</b>	Butch Cassidy and the Sundance Kid	18:06-20:04	pre-	1	cigarette	PG	n

\*in 6pm to 10pm analysis period only

### **6.2.3 Tobacco paraphernalia**

Tobacco paraphernalia appeared 555 times in 504 one-minute intervals in 204 separate broadcasts, and mostly comprised no smoking signs and/or symbols

(52%; 291/555), followed by cigarettes, cigars, pipes, tobacco packets (23%; 130/555), ashtrays (14%; 75/555), lighters or matches (9%; 49/555), and other (1%; 10/555) (**figure 6.9**). Other tobacco paraphernalia appearances comprised of seven Nicorette inhalators, a cigarette vending machine, a picture of a pipe, and a metal cigarette carrying case.



#### **6.2.4 Inferred tobacco use and other tobacco reference**

Implied tobacco use occurred in 82 intervals (0.3%; 82/25210) and was usually non-verbal (56 one-minute intervals, 68%; 56/82) than verbal references (26 one-minute intervals, 32%; 26/82). Examples of the implied tobacco use that was seen on television is shown in **figure 6.10**.

**Figure 6.10:**

**Examples of implied tobacco use shown on television**

*Eddie Windass* (Steve Huison) holding a lit cigarette is shown in *Coronation Street*



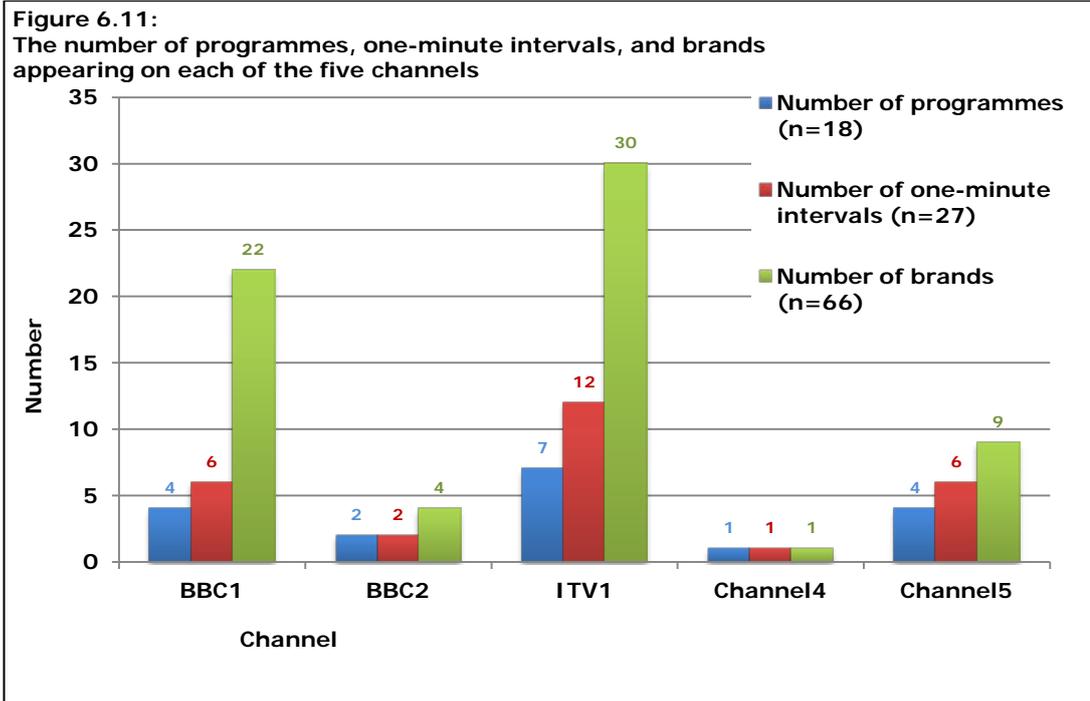
*Mort Rainey* (Johnny Depp) with an unlit cigarette in his mouth is the film *Secret Window* (shown on Channel 5)



Other references to tobacco occurred in 71 one-minute intervals (0.3%; 71/25210), of which 69 were contained in programming (97%; 69/71), and two in advertising/trailers (3%; 2/71). Most of the other references to tobacco that were seen were verbal (97%; 69/71), compared with non-verbal (3%; 2/71). An example comprises a news item broadcast as part of *BBC1 News*, where the newsreader announces paying NHS patients to quit smoking.

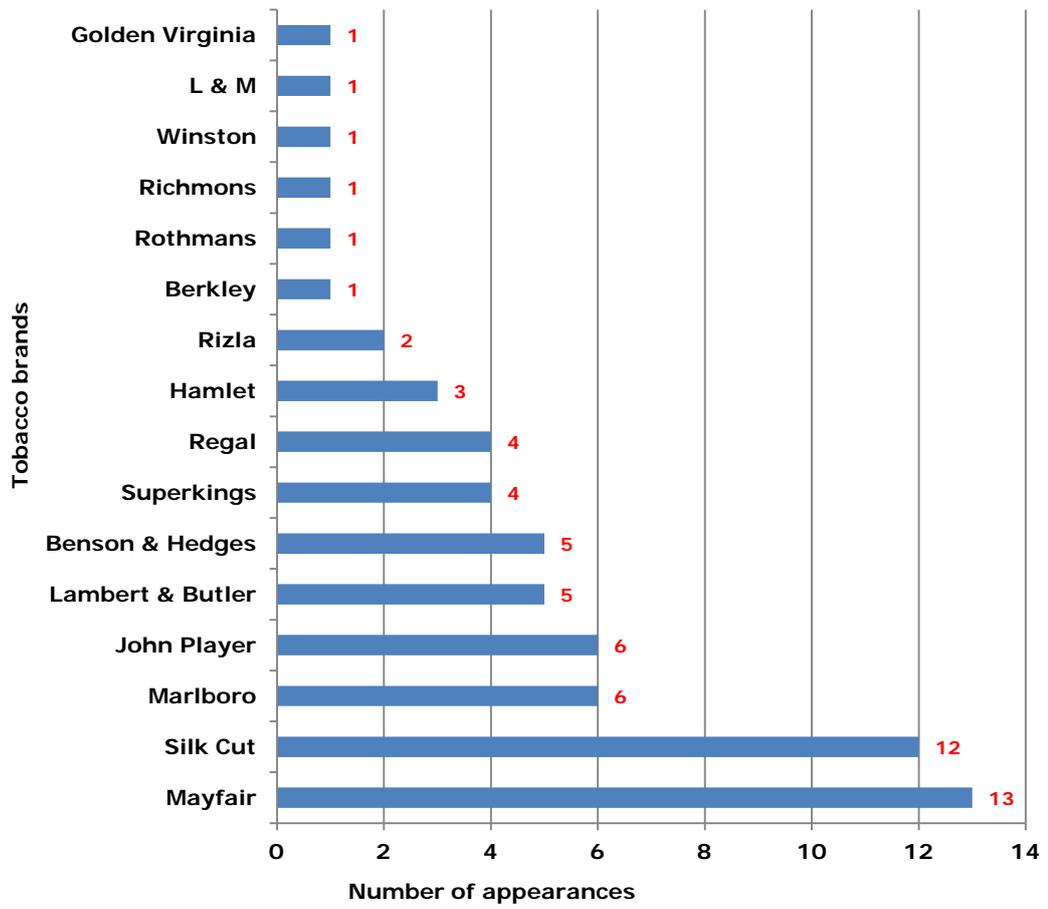
### **6.2.5 Tobacco brand appearances**

There were 65 brand appearances, occurring in 27 intervals (27/25210; 0.1%) in 18 programmes (18/613; 3%), and most frequently ( $\text{Chi}^2=16.36$ ,  $p<0.05$ ) on BBC1 and ITV1. The number of one-minute intervals, programmes and brand appearances by channel is shown in **figure 6.11**. The proportion of programmes containing tobacco brand appearances did not differ significantly between the five channels ( $\text{Chi}^2=7.80$ ,  $p>0.05$ ).



Individual brands and their frequency of appearance are shown in **figure 6.12**. Although some of these brand appearances occurred in historical footage, the most common source was point-of-sale tobacco displays, some of it in news reporting, but much in soap operas or other fiction (**table 6.2**). The programme with the most brand occurrences was an ITV1 soap opera, *Coronation Street*, where there were 27 brand appearances. Almost all brand appearances (97%; 63/65) occurred before the 9pm watershed, and only two occurred after the watershed (3%; 2/65).

Figure 6.12:  
The number of times each brand appeared (n=66)



<b>Table 6.2:</b>								
<b>Where tobacco brands appear</b>								
<b>Genre</b>	<b>Programme</b>	<b>Broadcast time*</b>	<b>pre-/post watershed</b>	<b>Intervals</b>	<b>No. of brands</b>	<b>Brands</b>	<b>Type of brand appearance</b>	<b>Description</b>
<b>BBC1</b>								
<b>Chat show</b>	The One Show	18:58-19:27	pre	3	12	Mayfair (2), Superkings (2); Silk Cut (2); Lambert & Butler (2); Benson & Hedges (2); Hamlet (1); Berkley (1)	Cigarette packets	Cigarette branded packets visible behind the counter of a newsagent in show item
<b>Game show</b>	A Question of sport	19:29-19:58	pre	1	2	Rothmans (1), Marlboro (1)	Advertisement & sponsorship	Clip of Formula One racing - Large Marlboro adverts, and Rothmans branded car
<b>News</b>	BBC News	18:00-18:57	pre	1	2	Benson & Hedges (1), Mayfair (1)	Cigarette packets	In an interview in a newsagents, cigarettes visible in the background
<b>Soap opera</b>	Eastenders	19:29-19:58	pre	1	6	Richmond (1), Rizla (1), Regal (1), Superkings (1), John player (1), Lambert & Butler (1)	Cigarette packets	In a newsagents, cigarette packets in the background on display (Also, Niquitin CQ & Nicorette visible)
<b>BBC2</b>								
<b>Documentary</b>	Mary Queen of Shops	19:03-20:02	pre	1	3	Marlboro green (1); Marlboro gold (1); Rizla (1)	cigarette packets	In the background of a scene in a shop cigarette packets were on display
<b>Drama</b>	Money	21:02-22:00	post	1	1	Winston (1)	cigarette packet	Winston branded tobacco packet on table
<b>ITV1</b>								
<b>Soap opera</b>	Coronation Street	20:30-20:57	pre	2	8	Silk cut (2); Superkings (1); Mayfair (2); Regal (1); Benson & Hedges (1); Lambert & Butler (1)	Cigarette packets displayed	Newsagents scene: cigarette display behind counter
<b>Soap opera</b>	Coronation Street	19:31-19:58	pre	1	1	Hamlet (1)	Cigar box	Cigar tin visible behind the bar in the rovers

								return bar
<b>Soap opera</b>	Coronation Street	20:29-20:57	pre	1	3	Silk Cut (1); Regal (1); Mayfair (1)	Cigarette display behind shop counter	Cigarette packets visible
<b>Soap opera</b>	Coronation Street	19:32-19:59	pre	1	2	Lambert and Butler (1); Mayfair (1)	Cigarette display behind shop counter	Cigarette packets visible
<b>Soap opera</b>	Coronation Street	20:30-20:58	pre	5	11	Silk Cut (5); Mayfair (5); Regal (1)	Cigarette display behind shop counter	Scene in corner shop - cigarette display
<b>Soap opera</b>	Coronation Street	20:28-20:56	pre	1	2	Hamlet cigars (1); Silk Cut Purple (1)	Cigarette packet and cigar tin	Bar scene in the Rovers return continues - Hamlet cigar tin , and Silk Cut Purple packet in the background of the scene
<b>News</b>	ITV News	18:00-18:57	pre	1	3	Mayfair (1); Silk Cut (1); Benson & Hedges (1)	Cigarette packets	News item showing a newsagents: in the background, behind the counter there's a cigarette display - Mayfair, Silk Cut and Benson & Hedges branded cigarettes visible
<b><u>Channel4</u></b>								
<b>Reality TV</b>	Big Brother	21:02-22:00	post	1	1	Golden Virginia (1)	Tobacco packets	In the Big Brother house one of the housemates is rolling cigarettes. There appears to be Golden Virginia tobacco packet
<b><u>Channel5</u></b>								
<b>Documentary</b>	Britain's Greatest Machines	20:02-20:59	pre	2	5	John Player (5)	Adverts and sponsorship	Clip of 80's motor racing showing track side advert for John Player, also John Player Special branded motor racing cars

<b>Chat show</b>	Live from Studio 5	18:30-19:26	pre	2	2	Marlboro (2)	Branded cigarettes	Item on show about methods of stopping smoking, a clip of a close up of someone lighting a cigarette is shown, the cigarette is Marlboro branded; close up of an ashtray showing Marlboro branded cigarettes
<b>Feature film</b>	Secret Window	21:01-22:00	pre	1	1	L & M (1)	Cigarette packet	Main character takes a packet of cigarettes out of his desk (L & M branded)
<b>News</b>	C5 News	18:59-19:01	pre	1	1	Marlboro (1)	Branded merchandise	News item: about paying people to stop smoking, close up of Marlboro branded, ashtray visible

### 6.3 Tobacco on television discussion

This study has demonstrated that tobacco imagery occurs in a third of all prime-time terrestrial television programmes broadcast in the UK, and particularly in feature films and reality TV. While the majority of this tobacco imagery comprised paraphernalia such as no smoking signs, actual tobacco use occurred in 12% of programmes, predominantly feature films, reality television, and comedy genres. Brand appearances were rare and sometimes occurred in historical footage, but arose predominantly from images of point-of-sale displays broadcast in news and other factual reporting, but also in fictional soap opera and other drama. Brand appearances were particularly common in one popular British soap opera, *Coronation Street*, which is broadcast on five occasions each week by *ITV1*, one of the most watched programmes on *ITV1* during the weeks recorded, and attracted between 6.5 and 10.4 million viewers per episode<sup>396</sup>. Almost all of the tobacco imagery we observed, including brand appearances, occurred before the 9pm watershed.

Relative to feature film analysis, interval coding of television programmes is particularly time consuming because the short duration of programmes and advertisements/trailers demands the use of much shorter intervals for analysis. We used one-minute intervals in a similar way as earlier researchers<sup>241 242</sup>, who investigated tobacco content on television. Additionally we used subdivisions to accommodate programme changes within intervals. To make the workload manageable we elected to code peak-time broadcasting over three one-week periods, as this would capture the most popularly viewed programmes. Our sample is therefore susceptible to seasonal influences on television content and news stories, but it is unlikely that this has distorted our findings because the main sources of tobacco imagery were programme genres that are shown throughout the year. At 420 hours of broadcasting we analysed considerably

more material than most other published studies<sup>243 245 397</sup>, including the 140 hours of UK programming analysed by Ofcom in 2005<sup>244</sup>, and since we included all programming during four prime-time hours each day, our sample is more representative of broadcasting viewed by children and young people in the UK than any other study.

Much earlier studies in the US have shown that tobacco use on television was common, with McEwan and Hanneman<sup>398</sup> showing 0.19 smoking incidents per hour of broadcast television in 1974, while Cruz and Wallack<sup>237</sup> in 1986 showed one smoking incident per hour of programming. In 1992 television broadcasting, Hazan and Glantz<sup>243</sup> showed about one event occurred every hour, with 24% of all programmes containing at least one tobacco event.

More recent studies that have looked at tobacco imagery on television have findings similar to those here, however direct comparisons cannot be made due to differences in the methodology, such as differences in the sample, coding, and recording methods. In Japan, drama series targeting young audiences showed tobacco imagery, with 12 out of the 14 dramas investigated containing actual tobacco use, however, overall there were relatively few scenes (measured in 3-minute intervals) that contained actual tobacco use (7.5%). Hanewinkel and Wiborg<sup>246</sup>'s study of contemporary German television programming found smoking occurrences in 45% of the programmes they sampled, and that these smoking occurrences were most frequent evident in feature films. Some of the earlier studies looked at very specific programmes, such as Blair *et al*<sup>240</sup> who content analysed substance use in the reality TV series *The Osbournes*, finding that most of the 18% of episodes that contained reference to tobacco were endorsing its use. In 2005 Ofcom undertook a content analysis of television broadcasting looking at smoking, alcohol and drugs on television<sup>244</sup> after points were raised by the public. They focused on the top 10 programmes most

frequently watched by 10-15 year olds, most of which (70%) were British soap operas (*Coronation Street*, *Eastenders*, and *Emmerdale*). Out of all programmes, (256) 62% contained tobacco, tobacco and smoking-related materials occurred in 22% of scenes, and most frequently occurred in the soap operas. Like this study, these researchers also found relatively few episodes of tobacco in *Emmerdale*. This study did not however code for tobacco brand appearances.

Exposure to tobacco imagery in films increases experimentation and uptake of smoking among children and young people<sup>67 69 73</sup>, and there is growing evidence that the same applies for imagery shown on television. Television viewing in general has been shown to be associated with smoking<sup>78 233</sup>, and also with earlier onset of smoking in adolescence<sup>399</sup> and increased smoking initiation<sup>77 400</sup>. For example, a national cross-sectional survey in India found that daily television viewing was associated with increased tobacco use<sup>233</sup>, while Gutschoven and Van den Bulck<sup>78</sup> found in their cross-sectional study of Belgian high school students who smoked, that those who watched greater amounts of television smoked more. In another study Gutschoven and Van den Bulck<sup>399</sup> additionally found higher levels of television viewing to be related to earlier onset of smoking behaviour in adolescents. Hancox *et al*<sup>400</sup> also found that increased television viewing among 5-15 year olds increased subsequent smoking. Gidwani *et al*<sup>77</sup> found that a dose-response relationship with television viewing and smoking initiation exists, with those who watched television for more than four or five hours per day were between five and six times more likely to initiate smoking than those who watched less than two hours per day.

Not all of the tobacco imagery we observed was necessarily similarly hazardous, as the impact of tobacco paraphernalia such as no-smoking signage is likely to be very different from actual tobacco use, and indeed some tobacco imagery arose from the depiction of smoking cessation product promotions.

However, actual tobacco use provides a strong behavioural model for young people likely to be as potent in television programmes as in films. Tobacco brand appearances are likely to create and reinforce brand awareness among young viewers.

As reported in **Chapter 4** we found that there were high levels of tobacco imagery in the films, including films classified as suitable for viewing by children and young people<sup>401</sup>. Three of the films that were included in the television broadcasting were also included in the films coded earlier (*Johnny English*, *Lord of the Rings: the Fellowship of the Ring*, and *Borat*). All the feature films that showed tobacco imagery were rated BBFC 15 and lower age categories. Given the frequent occurrence of tobacco imagery in feature films popular at the UK box office, it is not surprising that the films shown in television broadcasting make a significant contribution to the broadcast of tobacco imagery when they come to be shown on television. Other prominent sources of smoking imagery in our study included reality TV, soap operas, comedy and drama, and although smoking content in programmes shown before the 9pm watershed is required by Ofcom to be editorially justified, that justification was rarely evident to us.

The inclusion of real tobacco brands (as opposed to fictitious brands) in *Coronation Street* and other fictional programmes appeared particularly unnecessary, and of questionable legality given the 2002 Tobacco Advertising and Promotions Act (TAPA)<sup>402</sup>. Such point-of-sale displays broadcast contravene TAPA which defines a tobacco advertisement as either an *advertisement* “whose purpose is to promote a tobacco product, or whose effect is to do so”<sup>402</sup> (p 1). Ofcom has been aware of the high levels of tobacco imagery in UK soap operas at least since 2005<sup>244</sup>; our findings in comparison with that study<sup>244</sup> suggest that *Coronation Street* is the only soap opera that has not appreciably reduced tobacco content since then. Other soap operas broadcast, and popularly viewed,

contain no tobacco use (e.g. *Emmerdale* and *Hollyoakes*), and no tobacco reference, including tobacco branding, other than no-smoking signs (*Hollyoakes*, and with the exception of one ashtray visible outside of the village pub *Emmerdale*). Although much of this brand imagery arose from point-of-sale displays which are now scheduled to be prohibited in England (where *Coronation Street* is set), this change is not scheduled to apply to small retailers, such as those represented in *Coronation Street*, until 2015.

This study thus demonstrates that tobacco imagery, including smoking and tobacco branding, occurs to an appreciable degree in UK television and as such is likely to increase brand awareness and the risk of smoking experimentation and uptake among young children.

I suggest that guidelines on tobacco content need to be revised and more carefully enforced if we are to protect children from this hazardous exposure.

## **Chapter 7: Alcohol on television**

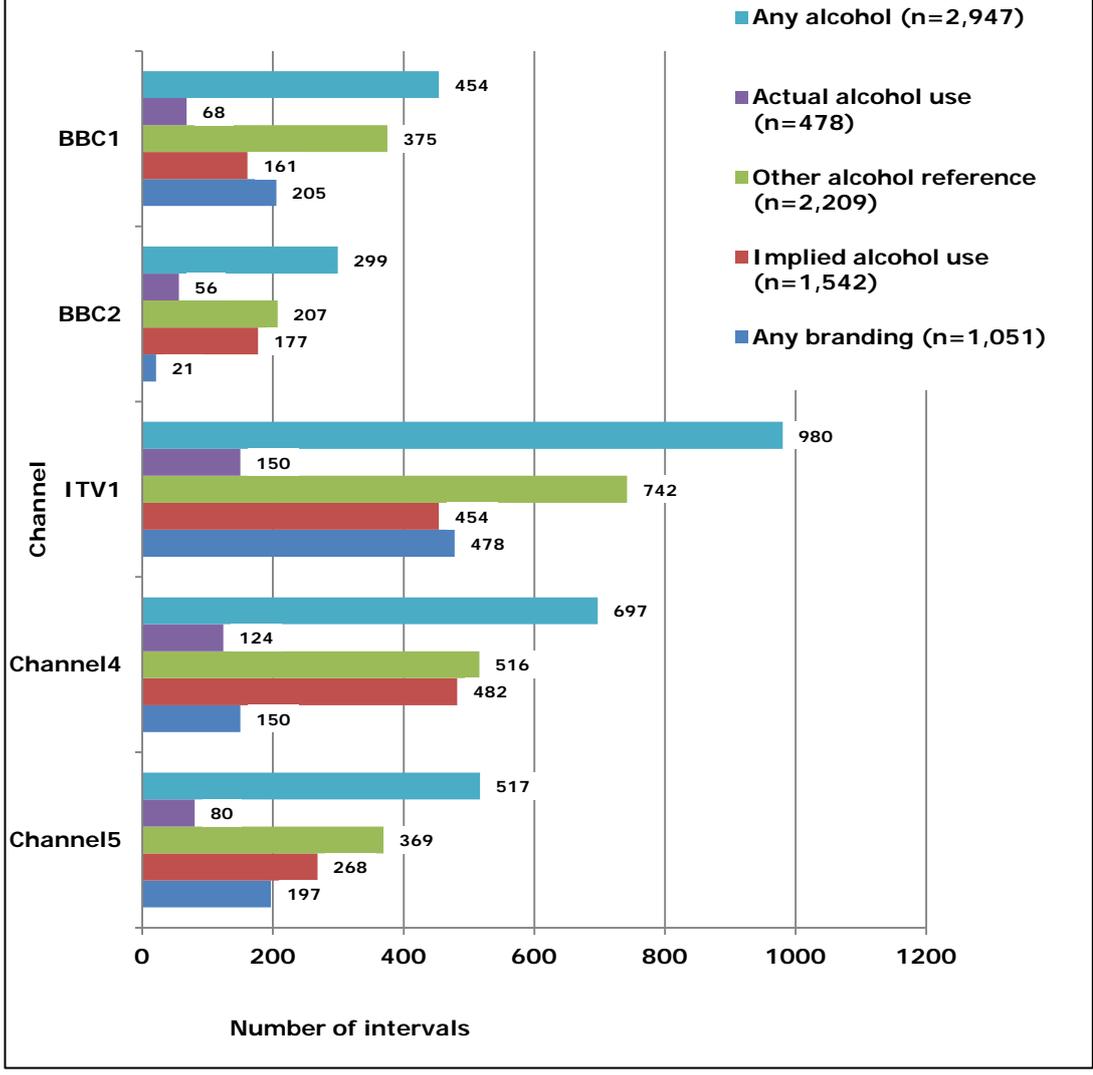
## 7.2 Alcohol results

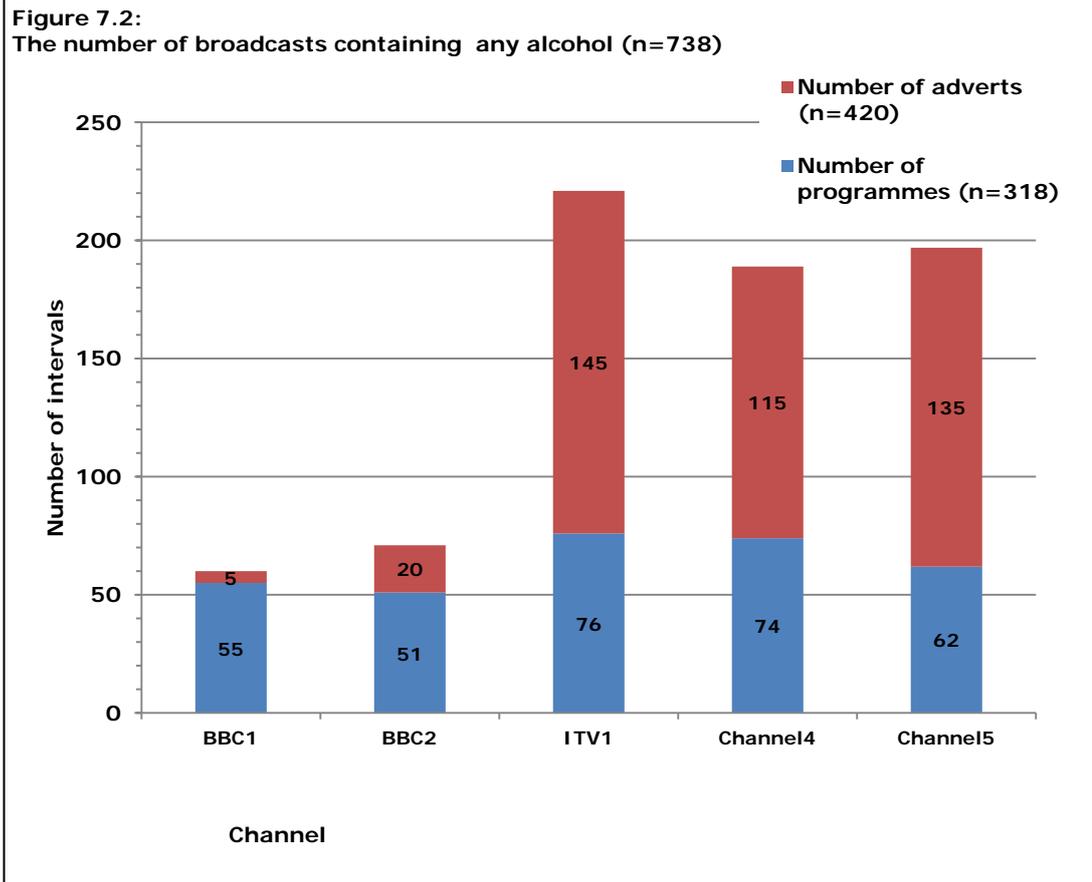
### 7.2.1 All alcohol episodes

All alcohol episodes, categorised as any alcohol content, were contained in 2,947 intervals (12%; 2947/25210). The proportion of intervals containing any alcohol was highest on ITV1 (19%; 980/5043.5), and lowest on BBC2 (6%; 299/5031.5); BBC1 had 9% (454/5040), Channel5 10% (517/5049), and Channel4 14% (697/5046). The proportion of intervals containing alcohol differed significantly between channels [ $\text{Chi}^2=521.19$ ,  $p<0.05$ ]. The number of intervals containing alcohol content by category and channel is shown in **figure 7.1**.

These intervals were contained in 738 separate broadcasts amounting to 43% (738/1734) of all broadcasts, and comprising 318 programmes and 420 advertisements/trailers, 52% (318/613) of all programmes, and 37% (420/1121) of all advertisements/trailers). The number of programmes and advertisements/trailers containing alcohol content by category and channel is shown in **figure 7.2**. The proportion of broadcasts containing any alcohol was highest on ITV1 (58%; 221/380), and lowest on BBC1 (27%; 60/225), [BBC2, 33% (71/217); Channel4, 45% (189/421); Channel5, 40% (198/491)]. The differences in proportions between channels were statistically significant [ $\text{Chi}^2=60$ ,  $p<0.05$ ].

**Figure 7.1:**  
**Number of one-minute intervals that contain any alcohol on each channel, by coded category**



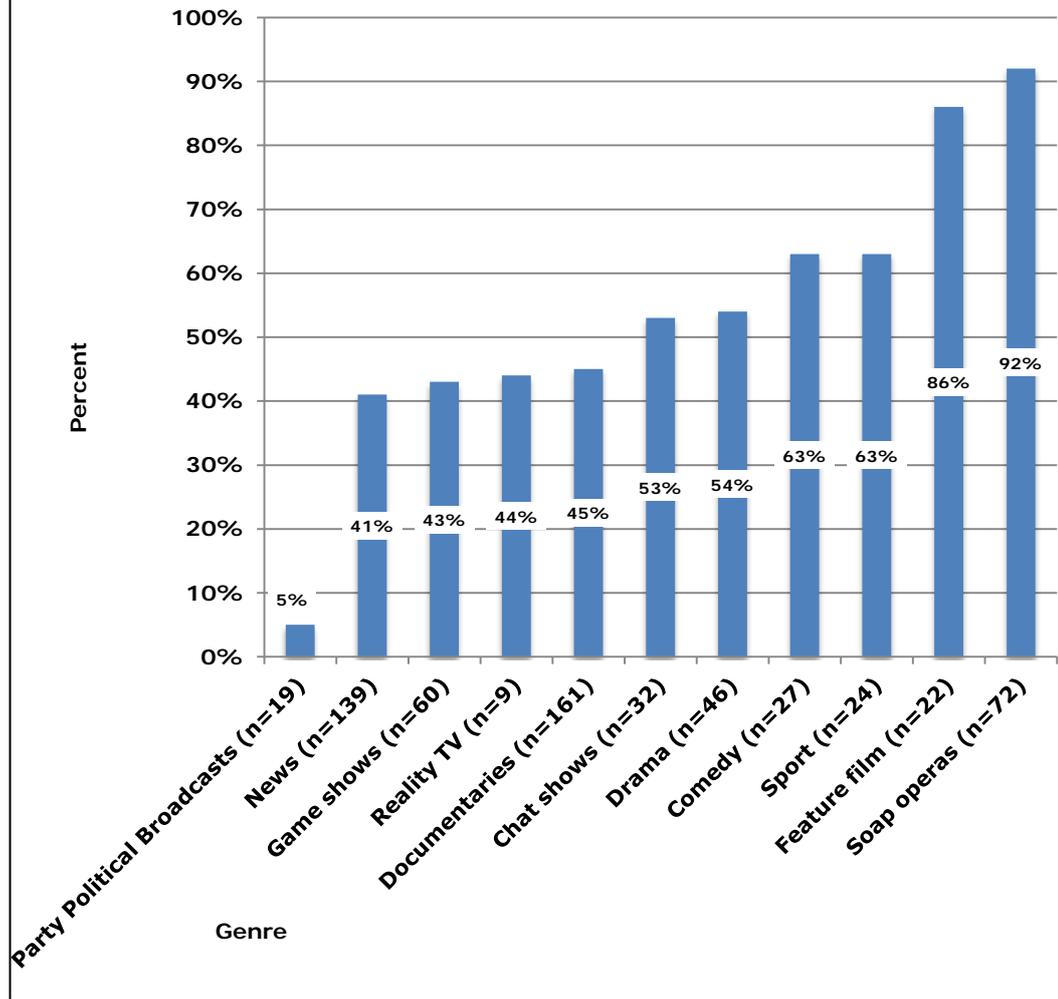


The frequency of all alcohol episodes, categorised as any alcohol content, varied between channels from occurring on average every five minutes (ITV1) to every 11 minutes (BBC1), and every 9 minutes of all television broadcasting (**table 7.1**). The frequency of actual alcohol use appearing in broadcasting also varied between channels from every 34 minutes (ITV1) to 91 minutes (BBC2), and, on average, once in every hour of television broadcasting (**table 7.1**).

<b>Table 7.1:</b>			
<b>The average number of minutes of television viewing before any alcohol, and actual alcohol use appeared</b>			
<b><u>Any alcohol</u></b>			
<b>Channel</b>	<b>All broadcasting</b>	<b>Programmes</b>	<b>Adverts</b>
<b>All channels</b>	9mins (25210/2947)	9mins (21996/2430)	6mins (3214/517)
<b>BBC1</b>	11mins (5040/454)	11mins (4902/449)	28mins (138/5)
<b>BBC2</b>	17mins (5031.5/299)	18mins (4904/278)	6mins (127.5/21)
<b>ITV1</b>	5mins (5043.5/980)	5mins (4010.5/822)	7mins (1033/158)
<b>Channel4</b>	7mins (5046/697)	8mins (4138.5/541)	6mins (907.5/156)
<b>Channel5</b>	10mins (5049/517)	12mins (4041/340)	6mins (1008/177)
<b><u>Actual alcohol use</u></b>			
<b>All channels</b>	53mins (25210/478)	50mins (21996/438)	80mins (3214/40)
<b>BBC1</b>	74mins (5040/68)	72mins (4902/68)	n/a
<b>BBC2</b>	91mins (5031.5/55)	93mins (4904/53)	50mins (101/2)
<b>ITV1</b>	34mins (5043.5/150)	30mins (4010.5/133)	61mins (1033/17)
<b>Channel4</b>	41mins (5046/124)	34mins (4138.5/122)	453mins (907.5/2)
<b>Channel5</b>	62mins (5049/81)	65mins (4041/62)	53mins (1008/19)

There were 12 genres shown on the five channels, only one of which (sci-fi/fantasy, n=2) included no alcohol content. The proportions of programmes in each of the 11 genres (n=611) containing any alcohol are shown by channel in **figure 7.3**. The genre with the highest proportion of programmes containing any alcohol was soap operas (92%), followed by feature films (86%), sport (63%), and comedy (63%). The ten programmes showing the greatest number of intervals of any alcohol content are listed in **table 7.2**, and comprise predominantly football matches, and a dining game show. Alcohol intervals were equally likely to be broadcast before (12% of all intervals; 2189/19024.5) or after (12%; 758/6185.5) the 9 pm watershed [ $\text{Chi}^2=3.34$ ,  $p>0.05$ ].

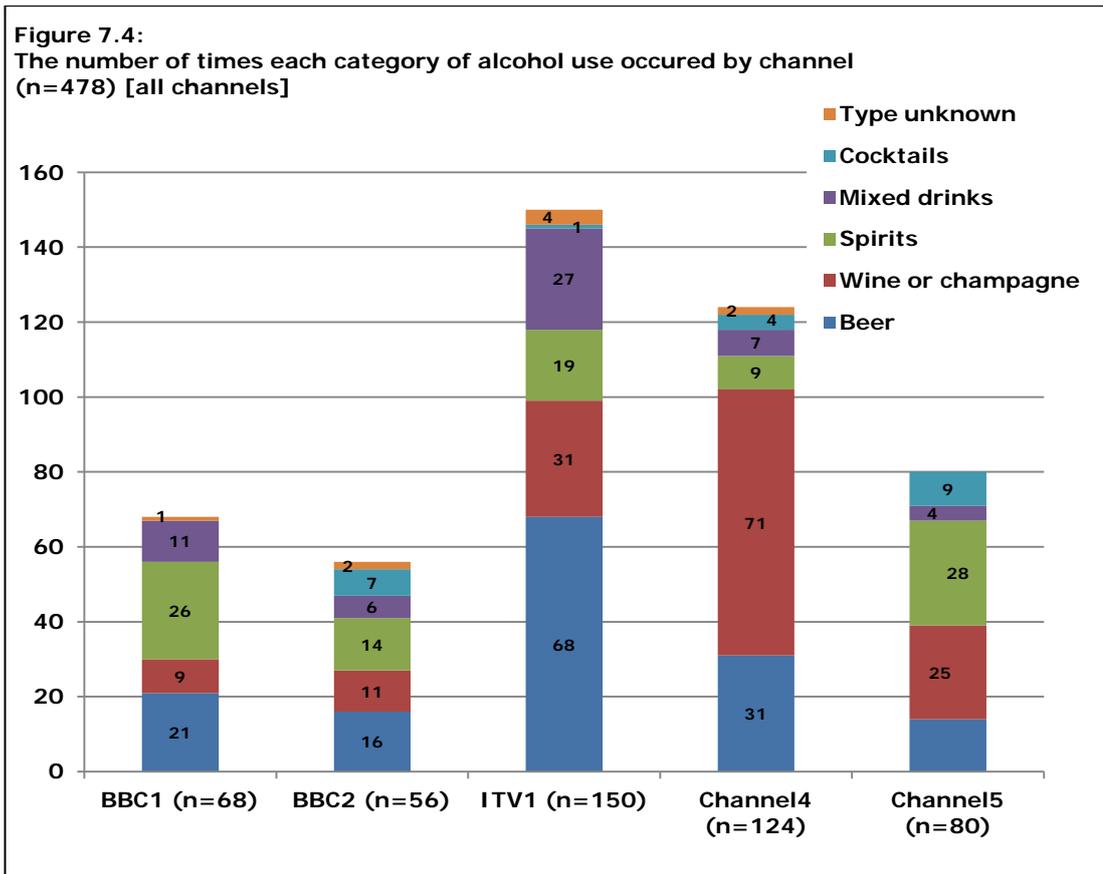
**Figure 7.3:**  
**The proportion of programmes in each genre containing any alcohol**  
**(n=611)**



	<b>Channel</b>	<b>Programme (genre)</b>	<b>Broadcast (length)</b>	<b>pre-/post-watershed</b>	<b>Nos. of Intervals</b>	<b>% of intervals</b>	<b>Branding y/n (nos.)</b>
1.	<b>ITV1</b>	UEFA Champions league (sport)	19:02-21:57 (150mins)	pre & post-	113	75% (113/150)	y (113) Heineken
2.	<b>ITV1</b>	UEFA Champions league (sport)	19:28-21:56 (126mins)	pre & post-	106	84% (106/126)	y (106) Heineken
3.	<b>Channel5</b>	UEFA – Europa league (sport)	19:30-22:00 (121.5mins)	pre & post-	78	64% (78/121.5)	y (78) Carling (1); Carlsberg (7)
4.	<b>Channel4</b>	Come dine with me (Game show)	20:00-21:00 (48mins)	pre-	42	88% (42/48)	n (0)
5.	<b>Channel4</b>	Come dine with me (Game show)	19:58-20:59 (49mins)	pre-	41	84% (41/49)	n (0)
6.	<b>ITV1</b>	World cup live coverage (FIFA) (sport)	18:29-21:48 (165mins)	pre & post-	40	24% (40/165)	y (39) Budweiser (1); Brahma (38)
7.	<b>Channel4</b>	Come dine with me (Game show)	19:59-21:00	pre-	39	80% (39/49)	y (3) Sol (1); Echo falls (2)
8.	<b>BBC1</b>	World cup March of the day (sport)	18:59-21:59 (180mins)	pre & post-	33	18% (33/180)	y (33) Budweiser (29); Carlsberg (4)
9.	<b>Channel5</b>	Message in a bottle (Feature film)	19:27-21:57 (120mins)	pre & post-	31	26% (21/120)	y (8) Budweiser
10.	<b>BBC2</b>	Mary Queen of shops (documentary)	19:03-20:02 (59mins)	pre-	31	53% (31/59)	y (3) Boddingtons (1); Fosters (1); Southern Comfort (1)

### **7.2.2 Alcohol use**

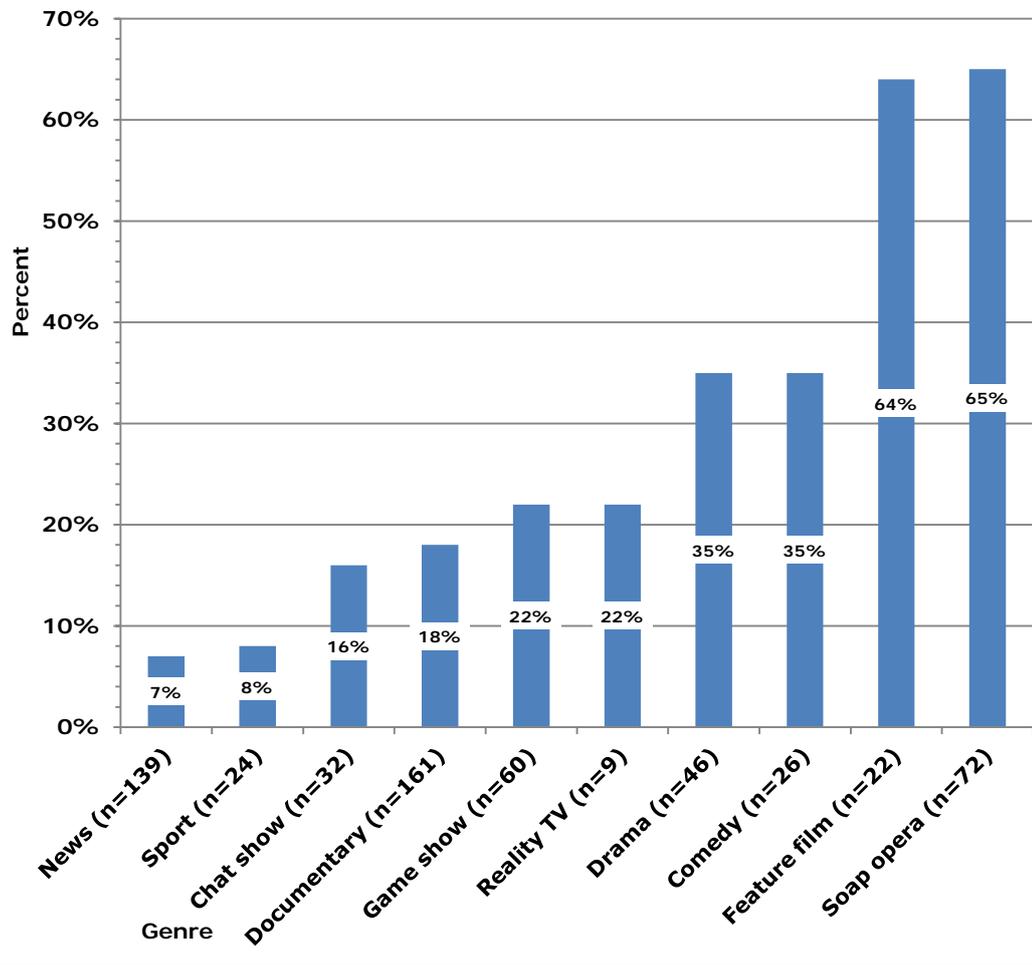
Episodes of actual alcohol use occurred in 478 intervals, or 2% (478/25210) of all the intervals broadcast. These intervals appeared in 147 programmes (24%; 147/613) and 37 advertisements/trailers (3%; 37/1121) and involved beer (150 episodes), wine or champagne (147), spirits (96), mixed drink types (55), cocktails (21), and type unknown (9). The number of times that intervals containing these six categories of actual alcohol use occurred on each channel is shown in **figure 7.4**.



Actual alcohol use occurred in 10 genres (**figure 7.5**), and in more than half of all soap operas (65%) and feature films (64%). The 12 programmes showing the greatest number of intervals of actual alcohol use are shown in **table 7.3**, four of which are soap operas, and two of which are feature films.

There was a significantly higher proportion of intervals containing alcohol use before (2.5%; 478/19024.5) than after (1.9%; 117/6185.5,  $\text{Chi}^2=7.30$ ,  $p<0.05$ ). Examples of where actual alcohol use has been shown on television are shown in **figure 7.6**.

**Figure 7.5:**  
The proportion of programmes containing actual alcohol use, by  
genre (n=611)[all channels]



	<b>Channel</b>	<b>Programme (genre)</b>	<b>Broadcast (length)</b>	<b>pre-/post-watershed</b>	<b>Nos. of Intervals</b>	<b>% of intervals</b>	<b>Branding y/n (nos.)</b>
1.	<b>Channel4</b>	Come dine with me (Game show)	19:59-21:00 (150mins)	pre-	14	29% (14/48)	n (0)
2.	<b>Channel4</b>	Hollyoakes (Soap opera)	18:30-18:58 (24mins)	pre-	11	46% (11/23)	n (0)
3.	<b>BBC2</b>	Money (Drama)	21:03-22:00 (57.5mins)	post-	10	16% (10/57.5)	n (0)
4.	<b>ITV1</b>	Emmerdale (Soap opera)	19:00-19:27 (23mins)	pre-	10	43% (10/23)	n (0)
5.	<b>BBC1</b>	Eastenders (Soap opera)	19:00-19:58 (58mins)	pre-	9	16% (9/58)	y (5)
6.	<b>BBC1</b>	Ashes to Ashes (Drama)	21:00-21:59 (59mins)	post-	9	15% (9/59)	n (0)
7.	<b>Channel4</b>	My big fat Greek wedding (Feature film)	18:11-20:54 (90mins)	pre-	9	10% (9/90)	n (0)
8.	<b>Channel4</b>	Come dine with me (Game show)	19:58-20:02 (49mins)	pre-	8	29% (8/49)	y (3)
9.	<b>Channel5</b>	Message in a bottle (Feature film)	19:27-21:57 (120mins)	pre- & post-	8	7% (8/120)	y (8)
10.	<b>ITV1</b>	Emmerdale (Soap opera)	19:01-19:27 (22mins)	pre-	8	3% (8/22)	y (1)
11.	<b>ITV1</b>	Lewis (Drama)	10:04-22:00 (92mins)	pre- & post-	8	9% (8/92)	n (0)
12.	<b>BBC1</b>	Inspector George Gently (Drama)	20:31-21:59 (88mins)	pre- & post-	8	9% (8/88)	n (0)

**Figure 7.6:**

**Examples of actual alcohol use shown on television**

*Eddie Windass (Steve Huison) drinks beer from a can in Coronation Street*



*Ronnie Mitchell (Samantha Womack) takes a drink of Gin and Tonic in Coronation Street*



*Charlotte Lu (Amy Yamazaki) in Hollyoakes takes a drink of beer*

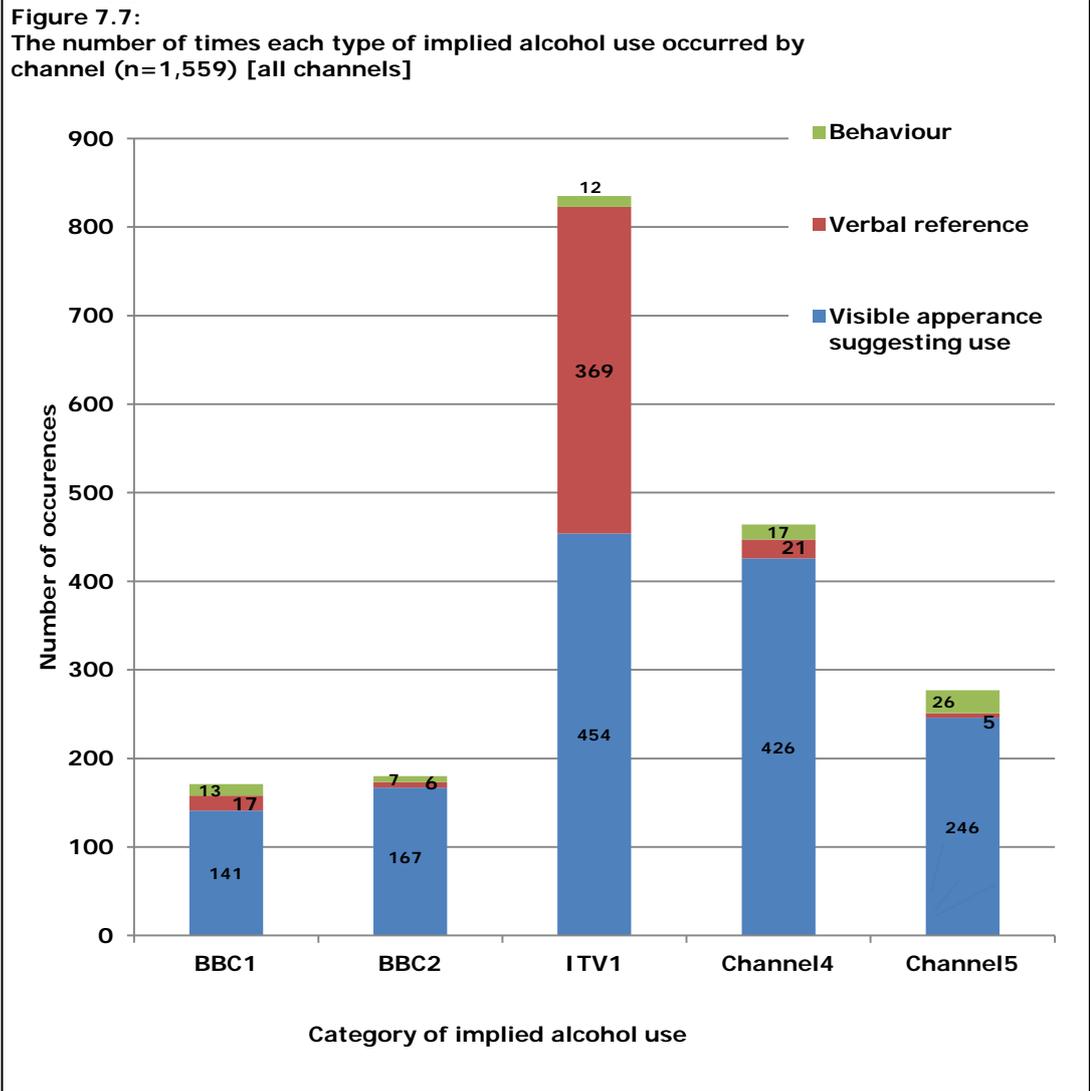


*Frances Owens (Stockard Channing) drinking margarita cocktails in the film Practical Magic (shown on Channel 5)*



**7.2.3 Implied alcohol use**

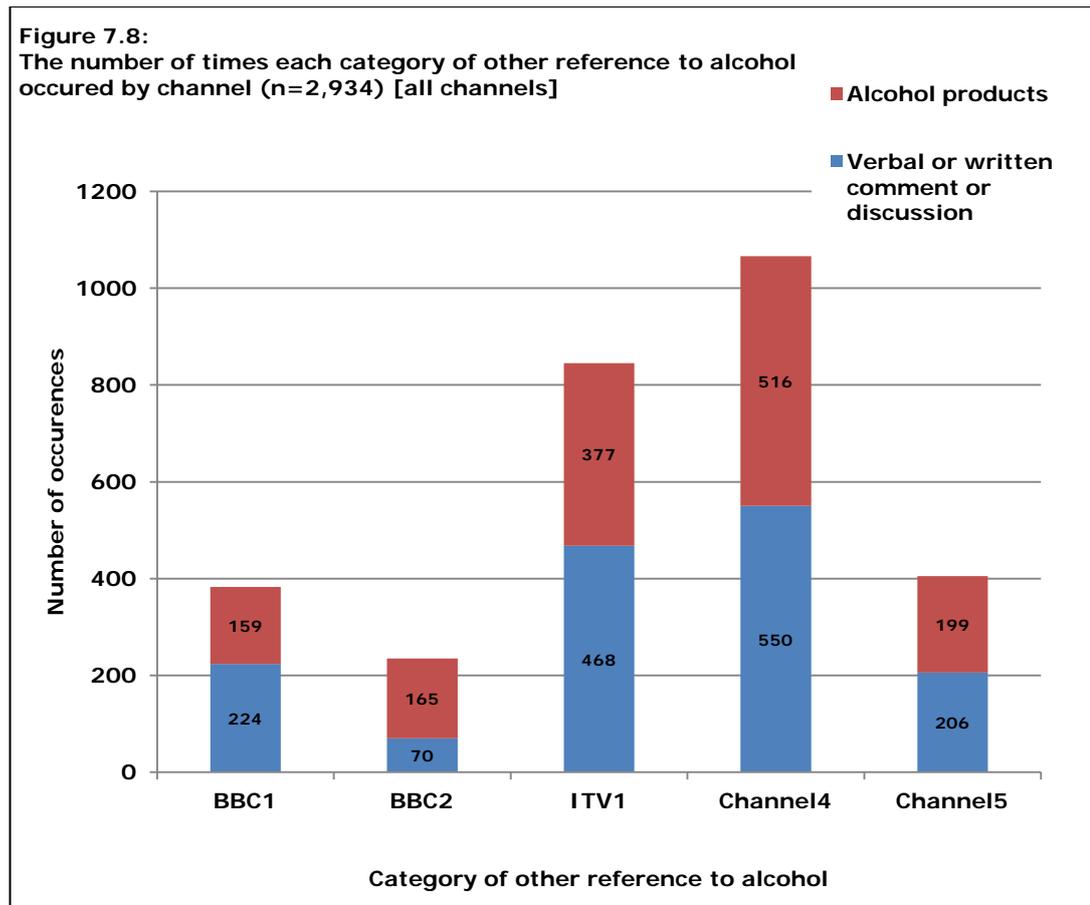
Implied alcohol use episodes occurred in total 1,559 times, either alone or in the same interval as another category of implied alcohol use, in 1,542 intervals (6%; 1542/25210). These intervals of implied alcohol use were present in 493 broadcasts (28%; 493/1734), 221 programmes (36%; 221/613), and 272 advertisements/trailers (24%; 272/1121). The number of times each category of implied alcohol use occurred by channel is shown in **figure 7.7**.



#### 7.2.4 Other alcohol reference

Other reference to alcohol occurred 2,934 times, either alone or in the same interval as another category of other reference to alcohol, in 2,209 intervals (359 in advertisements/trailers, and 1,850 in programmes); 9% (2209/25210) of all broadcast intervals, 8% (1850/21991) of all programme intervals, and 11% (359/3214) of all advertising/trailer intervals. These intervals of other reference to alcohol were present in 563 broadcasts (32%; 563/1734, 287 programmes (47%; 287/613), and 276 advertisements/trailers (25%; 276/1121). The

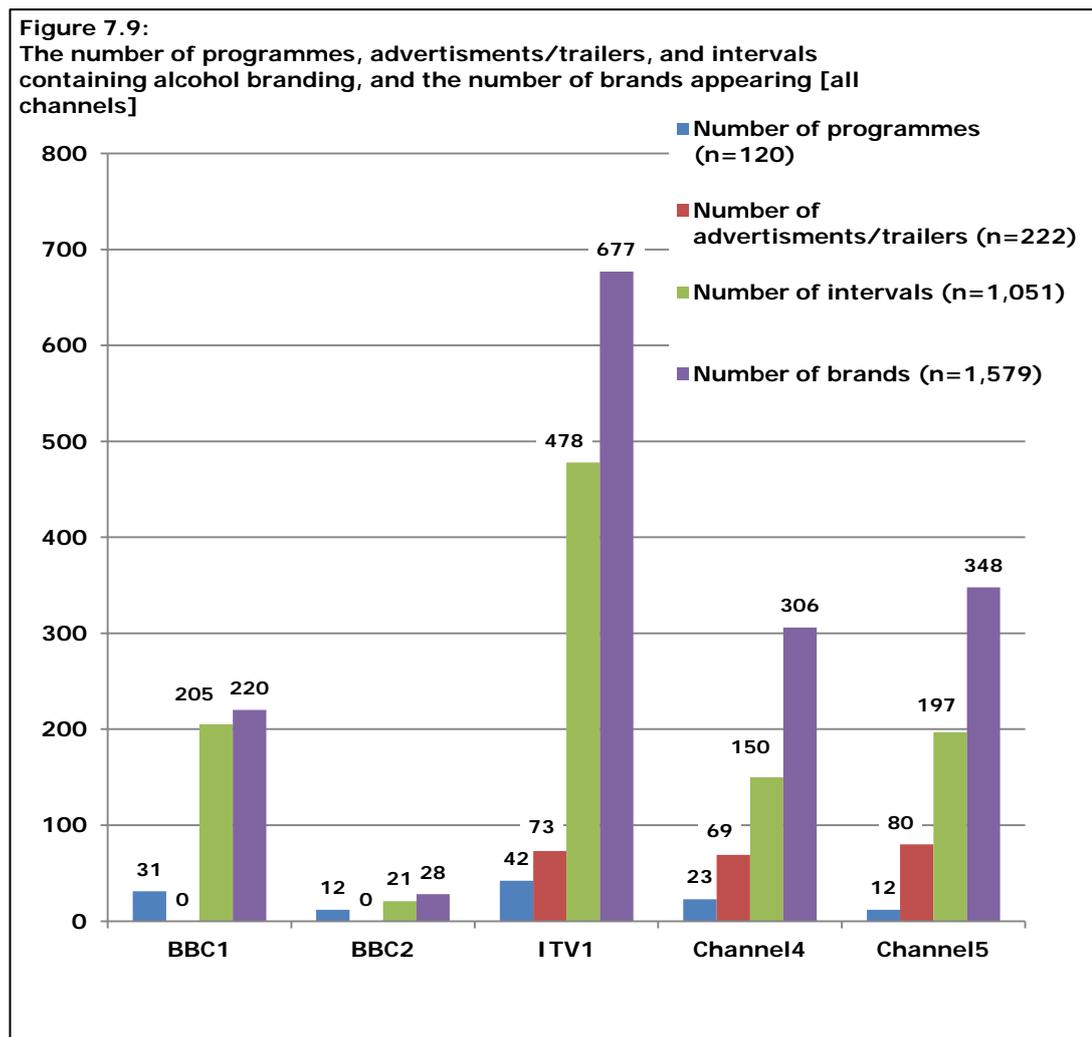
number of intervals containing each category of the other alcohol reference that occurred is shown by channel in **figure 7.8**. Other reference to alcohol was more frequently a verbal or written comment or discussion (1518) either alone or with the presence of alcohol products where no use or implied use occurred (1416).



### 7.2.5 Brand appearance

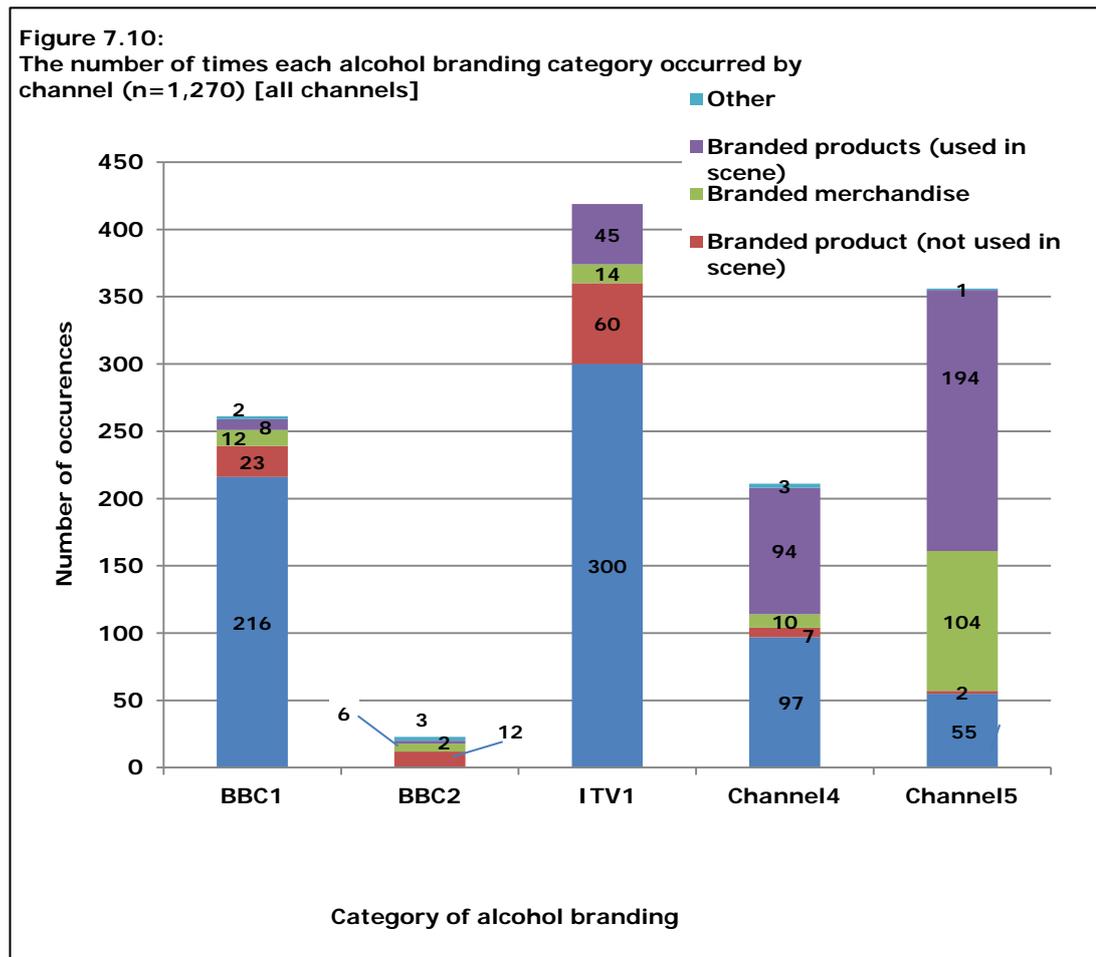
There were 1,579 alcohol brand appearances in 1,051 intervals (4%; 1051/25210). More alcohol brands were seen in programme appearances (844) than in advertising/trailers (735), though the proportion of advertising/trailer intervals containing alcohol branding was statistically significantly higher (9%; 288/3214) than that of programme intervals (3%; 763/21991), [ $\chi^2=211.6$ ,

p<0.05]. The proportion of programmes (21%; 120/613), and the proportion of advertising/trailers containing alcohol branding (20%; 222/1121) were similar, [chi<sup>2</sup>=0.03, p>0.05]. The number of programmes, advertisements/trailers, and one-minute intervals, and the number of brand appearances by channel is shown in **figure 7.9**.



Alcohol branding episodes comprised advertising, such as billboards (668), branded products such as bottles visible behind a bar (343) or held or used (104) in a scene, branded items such umbrellas or clothing (146). There were nine

other brand representations, all of them verbal, as for example an offer of a branded drink that was not seen. The number of times each alcohol branding category occurred, either alone or in the same interval as another alcohol brand category, by channel is shown in **figure 7.10**.

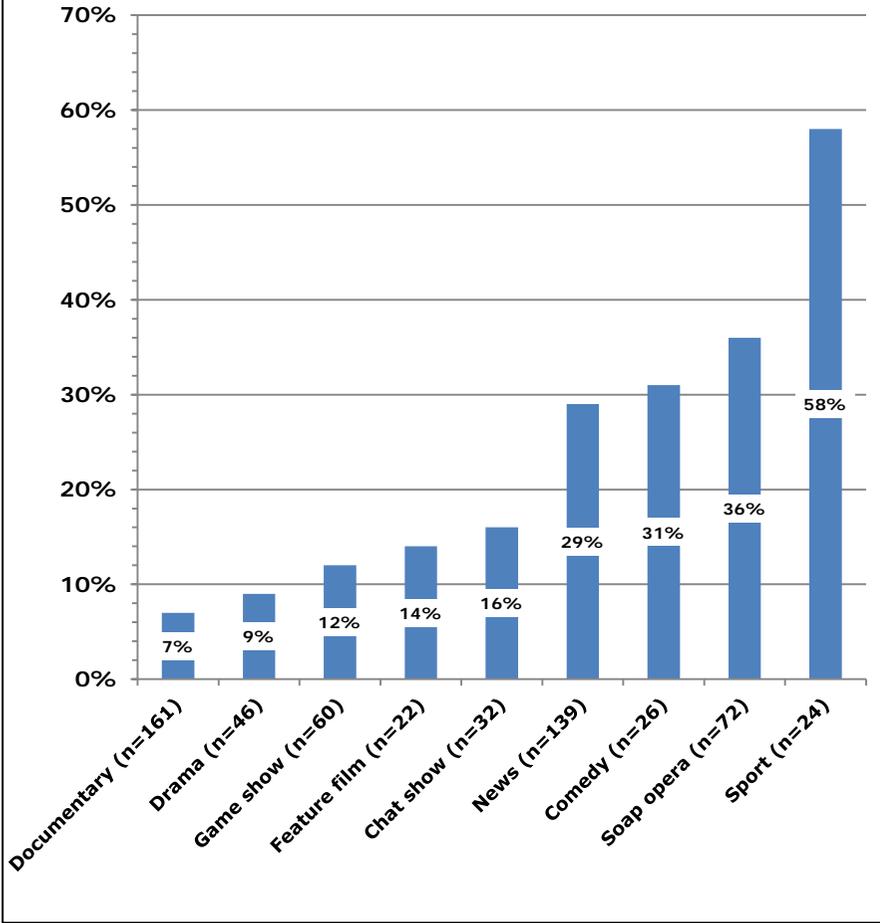


Alcohol brands were most frequently seen in sports programmes, with 518 intervals of alcohol brands being seen in 14 sports programmes; then in news (96 intervals in 41 programmes) and soap operas (59 intervals in 26 programmes). The proportion of programmes in each genre containing alcohol branding is shown in **figure 7.11**, and the proportion of intervals containing

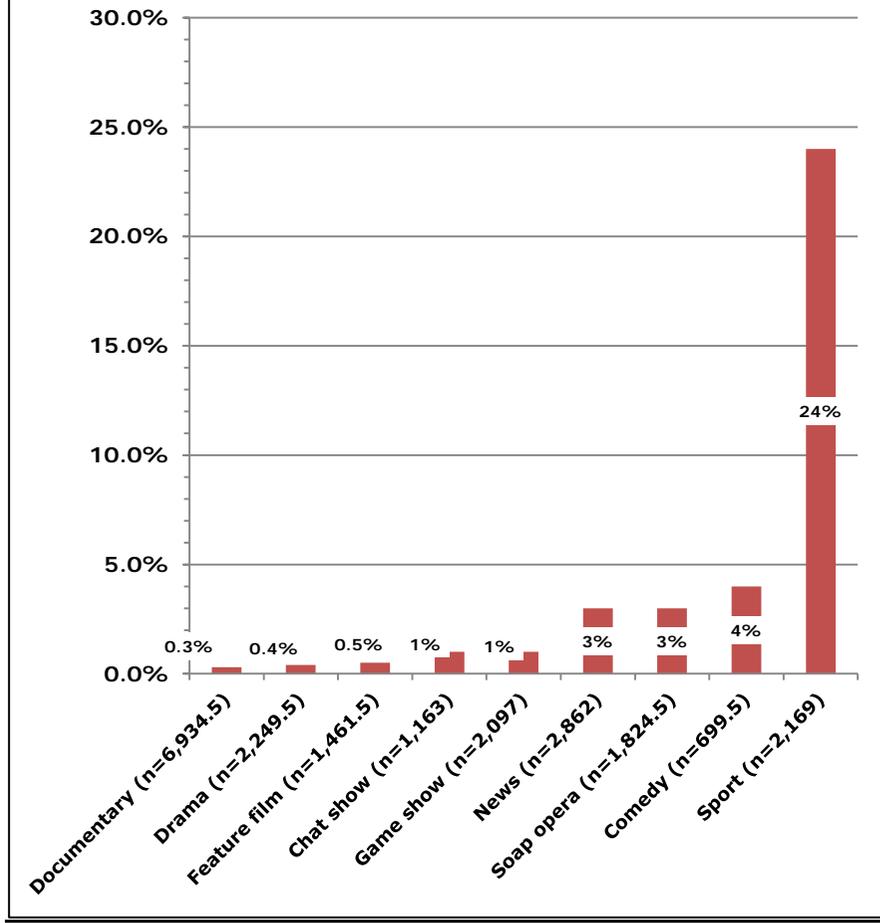
alcohol branding in each genre is shown in **figure 7.12**. Sport was the genre with both the highest proportion of programmes and the highest proportions of intervals containing alcohol branding.

The 1,579 brands that appeared were most frequently *Heineken* (263) followed by *Budweiser* (237), and *Carlsberg*; combined these beer brand appearances accounted for 41% (669/1579) of all brand appearances. These, and the other alcohol brands that appeared, are shown in **figure 7.13**. Examples of alcohol branding seen on television are shown in **figure 7.14**.

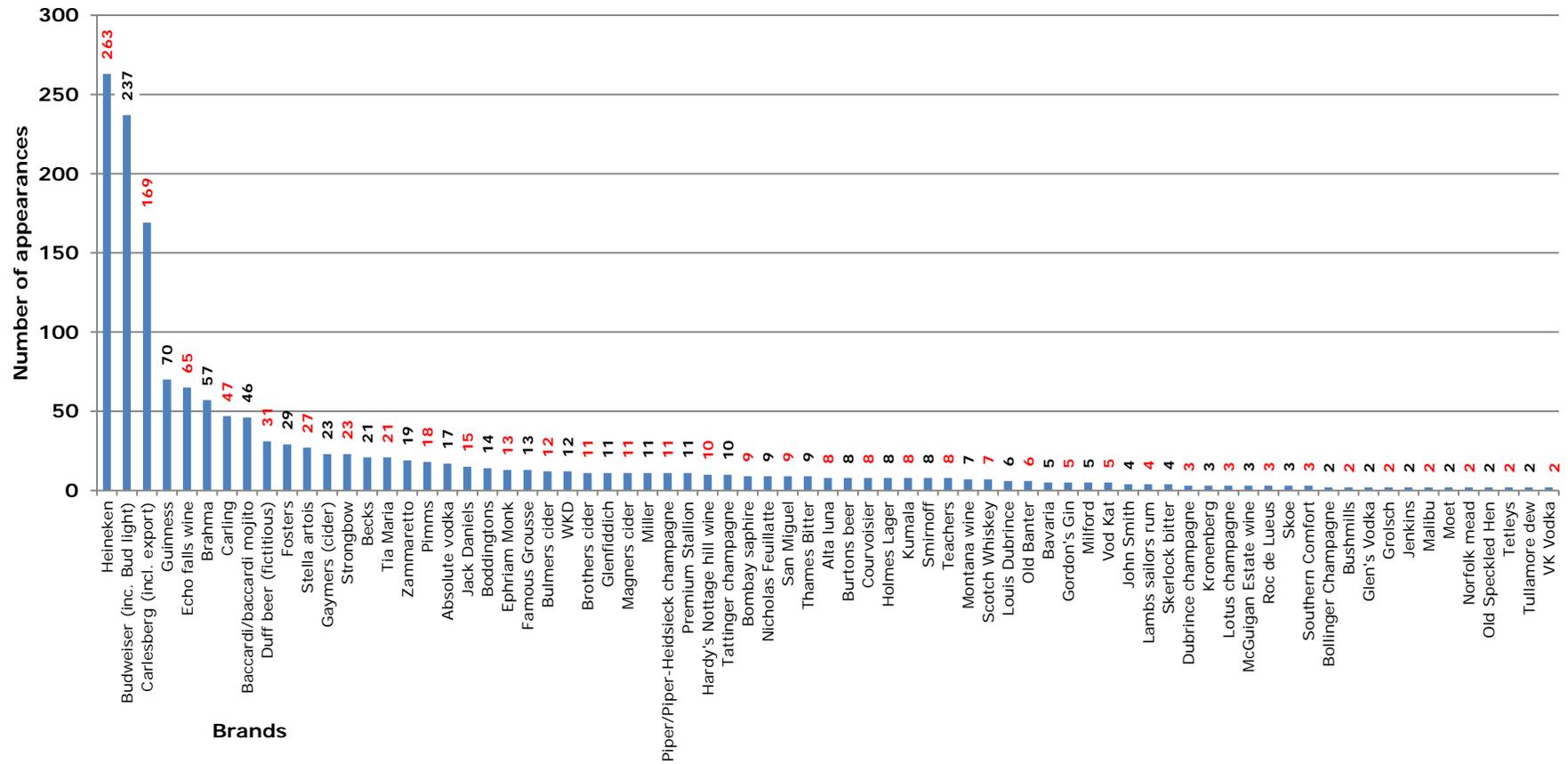
**Figure 7.11:**  
The proportion of programmes containing alcohol branding, by genre (n=120)[all channels]



**Figure 7.12:**  
The proportion of intervals containing alcohol branding, by genre (n=1,051)[all channels]



**Figure 7.13:**  
**The brands that appeared, and the number of times that they appeared (n=1,579) [73 brands shown\*]**



\*A further 36 brands appeared once each.

**Figure 7.14:**

**Examples of alcohol branding shown on television**

*Guinness* branding in actual *Guinness* advertisement



*Heineken* branding shown in sponsorship of forthcoming sporting broadcast



*Old banter* and *Ephriam Monk* branded beer pumps visible in a scene in *Emmerdale*



*Churchwaris* branded cider shown in advertisement for *Lidl* supermarket



**7.3 Alcohol on television discussion**

This study has shown that alcohol content occurs extremely frequently on UK television, on average once in every nine minutes of broadcasting. Alcohol imagery was present in more than 40% of all broadcasts, more than a half (52%) of all programmes, and more than a third (37%) of all advertisements/trailers; and mostly in soap operas, feature films, sport, and comedy. Alcohol appearances were equally frequent before and after the 9pm watershed. Actual alcohol use, most commonly beer drinking, occurred in nearly a quarter of all programmes, and in more than half of all soap operas and feature films. Implied

alcohol use was common, and present in a third of all programmes and a quarter of all advertisements/trailers. Other reference to alcohol was present in a third of all broadcasts.

Alcohol branding, most commonly secondary advertising (where brands are shown in advertising from another source, such as branded products featuring in an advertisement for a particular shop or supermarket) occurred in about a fifth of all programmes, over half of all sports programmes, a third of soap operas and comedies, and a fifth of all advertising/trailers. The most common brands seen were *Heineken*, *Budweiser*, and *Carlsberg* beers, which accounted for about 40% of all brand appearances on-screen.

Compared with an earlier study carried out in the US in the 1970's<sup>231</sup> where actual alcohol use occurred on average twice every hour, these results show similar findings with alcohol use occurring about once every hour across all channels, and about twice every hour on ITV1. An earlier study of alcohol portrayal on British television<sup>269</sup> demonstrated that on average there was a reference to alcohol every 6 minutes in 1988, and findings here show slightly lower levels where, on average, alcohol imagery occurred every 9 minutes.

Earlier studies have shown that alcohol imagery is commonly shown in both advertisements and programmes on television<sup>229 241 242 262 266 270 272 323</sup>, and Ofcom's study<sup>244</sup> also found beer to be commonly consumed on-screen. Pendleton *et al*<sup>272</sup> examined programmes on British television in 1988, and found that alcohol was most common in fictional programmes, particularly one soap opera series, *Eastenders*. Another UK study, in 1997<sup>270</sup>, found that alcohol was present in 86% of soap opera programmes broadcast, and most commonly in *Emmerdale Farm*. Our study also found alcohol portrayal to be common in soap operas (any alcohol; 92%, actual alcohol use 65%), and both *Emmerdale* (known as *Emmerdale Farm* until 1989) and *Eastenders* featured in the table

showing the top programmes containing the greatest amounts of actual alcohol use (**table 7.3**).

Another early study in 1982 found that alcohol imagery was most commonly shown in films shown on television<sup>266</sup>, a finding that is echoed in this present study. As reported in **Chapter 5** we found that there were high levels of alcohol imagery in films, including films classified as suitable for viewing by children and young people<sup>403</sup>. The findings here also show that the films shown on television during the recorded period contained high levels of alcohol imagery, including actual alcohol use. All the feature films that showed alcohol imagery were rated by the BBFC as suitable for viewing at 15 or lower age categories. As with tobacco in films shown on television and the frequent occurrence of alcohol imagery in feature films popular at the UK box office<sup>403</sup>, it is also not surprising that the films shown on television contribute to the broadcast of alcohol imagery when they come to be shown on television.

This study has shown that sports programmes were the genre containing the highest proportion of programmes including branding, as well as the genre with the greatest proportion of intervals containing branding, consistent with previous reports<sup>241 242</sup>. In the US the frequency and nature of alcohol advertising in sports programmes was investigated, and beer was shown to be the most common alcoholic drink advertised<sup>241</sup>. Although not directly comparable as we content coded all television broadcast and not only sports programmes, we also found that beer was the most common alcoholic drink consumed on-screen, and also beer brands were the most common alcohol brands to feature in any of the broadcasts.

Early studies from the 1970's and 1980's have linked exposure to drinking shown on television with drinking behaviour. For example Johnson (in US Congress p149<sup>258</sup>) reported that both television advertisements and

television programmes encouraged general patterns of consumption, and in particular patterns of alcohol use, while Breed and Defoe<sup>259</sup> suggest that alcohol imagery shown on television normalises drinking behaviours. Singer<sup>404</sup> suggests that characters drinking and drinking scenes in television programmes may be establishing models of desirable behaviour.

In an experimental study, Rychtarik *et al*<sup>264</sup> randomly assigned children, aged eight to 11, to one of three experimental conditions: television with drinking depictions, television without drinking depictions, and no television. The impact of each of these conditions was subsequently evaluated through a choice based task whereby the children had to choose to serve either whiskey or water to pictured adults and children. Those that were exposed to depictions of alcohol drinking on television were significantly more likely to choose alcoholic beverages for pictured adults, but not children. In 1994 Gube and Wallack<sup>261</sup> assessed the relation between televised beer advertising and drinking knowledge, beliefs and intentions among school children and found that awareness of televised beer advertisements was related to more favourable beliefs about drinking, greater knowledge of beer brands and slogans, and increased intention to drink as adults. Stacy *et al*<sup>260</sup> cross-sectionally assessed the impact of televised alcohol advertising on adolescent alcohol use, and found that an increase in viewing programmes that contained alcohol advertisements was associated with an increased future risk of beer and wine/liquor consumption.

The present study found no difference in the quantity of alcohol depictions broadcast before, or after, the 9pm watershed. Ofcom<sup>101</sup> require only that alcohol abuse must not feature in programmes specifically targeted at children, and in other programmes should *“generally be avoided and in any case must not be condoned, encouraged or glamorised in [...] programmes broadcast before the watershed [...] unless there is editorial justification”* (section 1.10<sup>101</sup>). Ofcom’s broadcasting code makes no reference to any other form of alcohol use

or generic or branded alcohol imagery and/or appearances other than in relation to alcohol abuse.

Ofcom has been aware of the high levels of alcohol imagery in UK soap operas, and that they are popularly viewed by young people, at least since 2005<sup>244</sup>. In addition to general alcohol imagery and consumption shown on-screen, soap operas contain many branded alcohol appearances, and brands appeared in 36% of all episodes broadcast. This is unsurprising given that the majority of soap operas broadcast during prime-time television viewing, especially those set in the UK, are centred around pubs (e.g. *Emmerdale* [The Woolpack], *Coronation Street* [The Rovers Return Inn], *Eastenders* [The Queen Victoria], *Hollyoakes* [The Dog in the Pond]). It is surprising however that although most of these pubs show fictitious branding (e.g. Ephraim Monk [*Emmerdale*], and Jenkins [*Eastenders*]), they show real alcohol brands as well (e.g. *Corona* branded beer bottles were visible in the background of a bar scene in *Eastenders*).

It is unlikely that real brand appearances are the result of paid product placement (defined by Ofcom as *“the inclusion of a reference (in vision or audio) to a product, service or trade mark within a programme as a result of payment or other valuable consideration made to the broadcaster, programme producer or a person connected to either”* (p 11)<sup>405</sup>), since any product placement has been allowed on UK television only since February 2011, and the criteria for placement specifically exclude alcohol products<sup>405 406</sup>. Alcohol, and other, brands are however permitted to appear as editorial content if they can be editorially justified<sup>405</sup>. The broadcasting code<sup>101</sup> that was in effect at the time that the broadcasts analysed in the present study were recorded states that product placement (as defined above) is prohibited, but prop placement (*“references to products or services acquired at no, or less than full, cost, where their inclusion within the programme is justified editorially, will not be considered to be product*

*placement*" (p 49)<sup>101</sup>). For both earlier, and the current, versions of the broadcasting code, these rules in regard to product placement are only applicable to programmes produced in the UK, and not programmes acquired from abroad, in which product placement may be permitted.

Many brands appeared in advertising, either in direct advertising of individual brands; in secondary advertising, in which the brands are advertised in advertising from another source (e.g. supermarket advertisements for alcohol promotions such as an Sainsbury's, which showed several brands of wine (*Alta Luna, Kumala, and Milford*) in an advertisement for half price wine offer available at their supermarkets), or sponsorship (such as *Zamaretto* branding appearing in programme trailers for *James Corden's World Cup Live* chat show). Advertising governance in the UK is a system of self-regulation overseen by the Advertising Standards Authority (ASA)<sup>300</sup> through the Committee of Advertising Practice (CAP)<sup>407</sup>, which comprises advertisers, agencies and media owners<sup>299</sup>. In relation to alcohol advertising on television the Broadcast Committee of Advertising Practice (BCAP)<sup>297</sup> rules must be adhered to, such as they must not *"appeal strongly to people under 18, especially by reflecting or being associated with youth culture or showing adolescent or juvenile behaviour"*<sup>297</sup>, and, alcohol *"may not be advertised in or adjacent to children's programmes or programmes commissioned for, principally directed at or likely to appeal particularly to audiences below the age of 18"*<sup>298</sup>.

Many programmes that children commonly watch are not necessarily programmes that have been specifically directed at children, and advertisements may not necessarily be specifically or exclusively for an alcoholic product, but alcohol brands can still feature, and do as has been demonstrated here, so in watching these programmes and the associated advertisements they remain exposed to alcohol brand images. Additionally, the CAP do not govern sponsorship advertising that is broadcast through programming, such as pitch

side advertisements at football or rugby matches that are televised, and as this is not classified as product placement, it is also not governed by Ofcom.

As three brands in particular featured considerably more than the others (*Heineken, Budweiser, and Carlsberg*), a brief overview of what each of these companies advocate in their advertising policies will follow. Additionally, as **table 7.2** demonstrates, alcohol branding was frequently coupled with sporting broadcasts, with these same beer brands commonly seen. *Heineken*<sup>310</sup>, who claim on their webpage to be the UK's leading beer and cider business with a market share of almost 30%, state in their corporate responsibility strategy that their brands *"will not be placed in, or on, media directed primarily at under 18's"* and they will *"not promote...[Heineken brands]...in media, events or programmes where the majority of the audience are known to be under 18"*<sup>311</sup>. The code of commercial communications for *Budweiser*, owned by *InBev* in the UK<sup>308</sup>, states that they *"want to ensure that [their] commercial communications are directed only at those above the legal drinking age"* (p 4)<sup>308</sup>, *"they will aim to place [...] marketing materials in [...] broadcast media where, on average, a minimum of 70% of the target audience for that media is reasonably expected to be above the legal drinking age"*, and they *"will not sponsor or target [...] marketing activities at events where the majority of the audience is expected to be below the legal drinking age"* (p 6)<sup>308</sup>. *Carlsberg Group*<sup>408</sup> claim that they *"should never address marketing communications specifically to minors [...], promote brands in the media, events, or programmes where more than 30% of the audience is known to be minors"* (p 3)<sup>408</sup>, and they also *"should avoid using themes or treatments with particular appeal to minors, featuring celebrities with particular appeal to minors, or likely to be regarded by them as role models"* (p 3)<sup>408</sup>.

Despite each of the companies advocating that they do not promote their products to children and young people, their brands are still appearing in programmes popularly viewed by children and young people, before the

watershed, and at times of the day that children and young people frequently view television.

With regards to alcohol advertising and promotion, several experts have proposed that tighter and more restrictive regulation is required to protect children and young people<sup>409 410</sup>, and others<sup>411</sup> have argued that more needs to be done to limit or prohibit the alcohol industry from promoting their brands at sporting events. However, although limiting alcohol advertising at televised sporting events would remove many of the alcohol brand appearances shown on-screen, this would not protect children and young people from the frequent and repetitive inclusion of alcohol and alcohol branding as prop placements seen in many fictional programmes shown on UK terrestrial television. Alcohol advertising, other depictions of alcohol branding, and the gratuitous inclusions of other alcohol imagery in programmes should be removed from television broadcasting before the 9pm watershed.

## Chapter 8: Final discussion

## **8.1 Summary of findings**

### ***8.1.1 Summary of film results***

This research has shown that tobacco and alcohol are commonly seen in films popular in the UK, with 70% of the 300 films analysed containing at least one tobacco episode, and 86% containing at least one alcohol episode. Tobacco branding appeared in 9% of all films, while alcohol branding appeared in 35%. This study has also shown that tobacco and tobacco branding appearances decreased over the 20 years investigated, and overall, alcohol episodes also fell slightly over the same period, although only in relation to a very high number of appearances in the first year of films analysed (1989). Films containing tobacco or alcohol episodes were commonly classified as suitable for children and young people to watch. The tobacco brands that were most commonly depicted were *Marlboro*, and *Silk Cut*, and the alcohol brands most commonly seen were *Budweiser* and *Miller*.

### ***8.1.2 Summary of television results***

Tobacco and alcohol are commonly portrayed in prime-time terrestrial television programmes broadcast in the UK, with tobacco occurring in 34% and alcohol in 52% of programmes. Tobacco episodes were extremely rare in advertisements/trailers (3%), but this was not the case for alcohol which was depicted in 37% of advertisements/trailers. For the programmes that contained tobacco and alcohol, differences were seen in the proportions containing tobacco and alcohol depending on genre. Any tobacco content occurred particularly in feature films and reality television, and actual tobacco use was predominantly found in feature films, reality television, and comedy genres. Any alcohol was most commonly found in sport, soap operas, feature films, and comedy genres,

and actual alcohol use in both soap operas and feature films. Tobacco brand appearances were rare, and occurred in no advertisements/trailers and in 3% of programmes, with the most frequently depicted brands being *Mayfair* and *Silk Cut*, with point-of-sale displays in *Coronation Street* being the main source. Alcohol branding was much more commonly seen in both advertisements/trailers (20%) as well as programmes (21%). Alcohol brands were most commonly depicted in sports programmes, news, and soap operas, with the most frequently depicted brands being *Heineken*, followed by *Budweiser* and *Carlsberg*.

### **8.1.3 Consideration of limitations of these data**

There are some potential limitations of the data collected. For films, although films originating from both US and UK film producers were included in the sample of films coded, the number of UK only films was very small (8 films), and the number of films with any UK production involvement was also relatively small (59 films) in comparison to the number of films categorised as US only (203 films) and as any US production involvement (281 films). Therefore caution must be taken when comparing content from the two countries in this sample. It would be beneficial for further research to be carried out to investigate further the tobacco and alcohol content of a larger sample of UK produced films.

For television, there are several potential limitations to the findings reported here. Firstly, using one-minute intervals to analyse television advertising did not allow each television advertisement to be considered separately, which would have been beneficial in quantifying the number of alcohol advertisements broadcast during the sample period. Whilst this method of using one-minute interval recording did allow for comparisons to be made between television programmes and advertising generally, as well giving an overall view of tobacco and alcohol content in overall television broadcasting, it

did not allow for the separation of trailers and commercial advertising, not the quantification of specific alcohol advertising. Therefore the fact that advertisements and trailers were not separated, and individual advertisements were not separated from each other limits the conclusions that can be drawn.

Additionally, as only UK television broadcasting was considered the findings are likely to be culturally specific only to the UK. On a similar note, there were several broadcasts that were recorded and included in the television broadcasting sample that were not typically or regularly scheduled on UK television, and therefore not all of the programmes included are likely to have been representative of UK television viewing generally. For example, there were several world cup football matches broadcast during the sample, a football tournament that only occurs every four years. However, as there were very few episodes of tobacco content in any of the sporting broadcasts shown, it is unlikely to have had any effect on the tobacco on television results found. Having said this, these broadcasts may have had an impact on alcohol on television results, as the vast majority of sporting programmes showed alcohol advertising and the majority of one-minute intervals contained in sporting programmes contained alcohol advertising, with the frequent sponsorship of sporting events by alcohol brands and companies (e.g. one of the world cup sponsors was *Budweiser*). However, only a small proportion of the television broadcasting recorded was sporting events (24 programmes comprising of 2,169 one-minute intervals) and an even smaller number that this were world cup football matches. Further research would be recommended to determine whether had any impact on the results. It certainly highlights a need for further research into the alcohol industry's relationship and sponsorship of popular sporting events.

## 8.2 Previous research

### 8.2.1 Comparison of tobacco results with earlier research

Earlier research from other countries has shown tobacco to be commonly found in films and on television<sup>207-211 213-215 221 222 224 236</sup>. No earlier studies have investigated the tobacco content of films popular in the UK, but the findings here that tobacco (70%) and tobacco branding (9%) are commonplace, but decreasing, in films popular in the UK, reflect earlier studies findings<sup>207-210 213-215 221 222 224 226 227 236</sup>. For example, Dalton *et al*<sup>208</sup> found tobacco contained in 87% of films, while Mekemson *et al*<sup>214</sup> found tobacco in 75% of films and additionally that the trend was decreasing overtime. Sargent *et al*<sup>226</sup> found that 28% of films contained tobacco brand appearances, while Adachi-Mejia *et al*<sup>227</sup> noted a decrease in brand appearances from 20.8% before to 10.5% after the voluntary agreement in the US to remove paid-for product placements in films. As in this study, previous research from the US on individual brand appearances has also identified *Marlboro* to be the most commonly depicted brand<sup>226 227</sup>.

As with films, earlier studies investigating tobacco content on television have shown it to be depicted commonly<sup>229 230 237-248 265 318 397 398</sup>. Of those studies that specifically looked at British television content<sup>244 318</sup>, one focused exclusively on popular programmes among young people<sup>244</sup>, while the other focused on British soap operas<sup>318</sup>, and no study described the tobacco content of all programmes and advertisements/trailers broadcast on British television. Early studies from the US<sup>237 398</sup> showed 0.19 smoking incidents (1974)<sup>398</sup> and one smoking incident (1986)<sup>237</sup> per hour of programming, and more recently twice every hour (2006)<sup>245</sup>. Other recent studies have findings similar to those found here, with tobacco appearing in relatively few intervals (3%), but in 35% of programmes. For example, youth targeted Japanese drama series showed tobacco use in most of the series investigated, but overall there were relatively

few scenes containing actual tobacco use (7.5%)<sup>248</sup>, and a German study<sup>246</sup> found tobacco in 45% of programmes.

### **8.2.2 Comparison of alcohol results with earlier research**

Earlier research has shown that alcohol content is commonly portrayed in films as well as on television<sup>179 209 210 218 219 236 251 254 263 271</sup>, however none of the earlier studies specifically investigated the occurrence of alcohol content in films popular in the UK. The findings here that alcohol content (86%) and alcohol branding (35%), particularly *Budweiser* and *Miller*, are commonly depicted are similar to findings from research conducted in other countries. For example, one US study<sup>254</sup>, found that alcohol appeared in 93% films, while a German study<sup>179</sup> found alcohol in 88% of films, and, similar to the findings here, earlier research<sup>210 218 219</sup> has shown alcohol commonly features in youth rated films. However, unlike Dal Cin *et al's* study<sup>255</sup> where branding was present in all film age classifications, there was no evidence found here of branding in the lowest age classification category, but the brands they found most commonly were *Budweiser* and *Miller*, the same finding as here.

Earlier studies have also shown that alcohol content in television broadcasting is frequent<sup>229 241 242 247 262 266 319-323</sup>, and even in British television broadcasting<sup>268-270 272 318</sup>. The present study is the most current study of the occurrence of alcohol content and alcohol branding in UK television, and the only recent study to include a cross-section of all prime-time broadcasting, including all programme genres as well as advertising/trailers from the five most popularly viewed television stations in the UK. An earlier study of alcohol portrayal on British television<sup>269</sup> demonstrated that a reference to alcohol occurred, on average, every 6 minutes in 1988, with the current findings showing slightly lower levels with alcohol imagery, on average, occurring every 9 minutes.,

Pendleton *et al*<sup>272</sup> found that alcohol use was most common in fictional programmes, particularly one soap opera series, *Eastenders*, while another<sup>270</sup> found alcohol present in 86% of soap opera programmes broadcast, and most commonly in *Emmerdale Farm*. Our study also found alcohol portrayal to be common in soap operas, although less so than sports programmes, and as found here, two earlier studies found alcohol branding to feature highly in sports programmes<sup>241 242</sup>.

### ***8.2.3 What this research adds to the existing research***

As can be seen, the results from earlier research into the tobacco and alcohol content, including branded appearances, in films has been shown to be common in other countries. However, this is the first study that has looked at both of these contents in the most successful films at the UK cinema box office. The results provide the evidence that both tobacco and alcohol content in films popular within the UK contain tobacco and alcohol content, and that this is even the case for films classified as suitable for viewing by children and young people in the UK.

Prior research that investigated tobacco and alcohol content on television, both in the UK and in other countries has shown that such content is common even although earlier research has most frequently focused on one or more specific television series or genre. This is the first recent study in the UK to comprehensively investigate the occurrence of both tobacco and alcohol content, including branding, in all prime-time television broadcasting, programmes and advertisements/trailers, on the five most popularly viewed channels in the UK.

### 8.3 Comparison of tobacco results with alcohol results

Both alcohol and alcohol branding were far more frequently shown in both film and television broadcasting than tobacco and tobacco branding. This is entirely consistent with the strict controls on tobacco advertising, promotion, and sponsorship in the UK. The Tobacco Advertising and Promotions Act (TAPA)<sup>64</sup> prohibits any *“advertisement whose purpose is to promote a tobacco product, or whose effect is to do so”* (p 1)<sup>64</sup>, and although TAPA does not specifically mention product placement in either films or television programming, if the placement is paid-for then it is classified as advertising and as a result is prohibited. There is evidence that the tobacco industry has previously paid for the placement of its products in films<sup>205 206</sup>, but there is no evidence that this still occurs. However, TAPA does not cover either the placement of generic tobacco content or branded appearances that are included in films or programmes for editorial, rather than advertising, purposes.

In addition to this, tobacco product placement in television programmes and films made in the US is covered by the 1998 Master Settlement Agreement (MSA)<sup>290</sup>, which ended the practice of tobacco product placement for several of the major tobacco companies in television programmes and films originating from the US. As each year the UK box office (UKBO) is continually dominated by US films this will have had a considerable effect on popularly viewed films in UK cinemas. Additionally, many US television series are internationally popular and aired in many countries around the world including the UK.

The issue of tobacco content in both television programmes and in films that is not included as the result of paid-for product placement, but rather for editorial or artistic reasons, is less regulated. As described in **Chapter 2**, all films in the UK are given an age rating classification by the British Board of Film Classification (BBFC), and the BBFC publish guidelines on how the content of

films will be regulated<sup>315</sup>. In addition to making sure that a film's content is within the law, the BBFC issues an age classification (U, PG, 12, 15, or 18) for each film they classify. The guidelines provide information on how each film will be classified at each of the age classification categories, in conjunction with three main qualifications: whether the material is in conflict with the law; whether the material, either on its own, or in combination with other content of a similar nature, may cause any harm at the category concerned; and whether the material, at the age group concerned, is unacceptable to broad public opinion. With specific regards to tobacco content, the current guidance<sup>315</sup> states only that where "*[smoking and tobacco use] feature to a significant extent in works which appeal to children, this will normally be indicated in the Consumer Advice and/or Extended Classification Information. Classification decisions will also take into account any promotion or glamorisation of such activities.*" (p 12 and 13)<sup>315</sup>. Tobacco content is not, in its own right, considered under any of the individual age classification categories.

Advertising is governed by a combination of both legislation and self-regulation, and televised advertising content is governed by the Broadcast Committee of Advertising Practice (BCAP) through the Advertising Standards Authority (ASA)<sup>300</sup>, whose members consist of advertisers, agencies and media owners<sup>299</sup>. It is the responsibility of advertisers to adhere to the rules of the code, and ASA only intervenes reactively when complaints are received. The BCAP are the advertising industry self-regulatory board who set the UK Code of Broadcast Advertising code (BCAP code<sup>297 298</sup>) which outlines that the advertising of tobacco products is prohibited, and advertisements must not promote smoking or the use of other tobacco products, and "*Advertisements that might be of particular interest to children or teenagers must not refer to tobacco or smoking, unless that reference obviously forms part of an anti-smoking or anti-drugs message*" (BCAP Code, Tobacco 10.5<sup>297</sup>).

The content of television programming is governed by Ofcom<sup>412</sup> who regulate the communications sector in the UK, and part of their role is to regulate television broadcasting with one of their main legal responsibilities being to ensure *“people who watch television [...] are protected from harmful or offensive material”*<sup>317</sup>. Like the BBFC, they publish the Ofcom Broadcasting Code (Incorporating the Cross-promotion Code) (OBC)<sup>101</sup>, providing the rules of broadcasting that broadcasters must follow. It is the responsibility of the broadcaster to comply with both the OBC, however Ofcom will only address breaches of the code reactively when they arise, such as through complaints from the public<sup>101</sup>. The first section of the code Protecting the Under-Eighteens<sup>101</sup> has the basic principle to protect those under 18, and states that *“Material that might seriously impair the physical, mental or moral development of people under eighteen must not be broadcast”,* and *“broadcasters must take all reasonable steps to protect people under eighteen”* (p 7)<sup>101</sup>, and also that *“Children [defined by Ofcom as under the age of 15] must also be protected by appropriate scheduling from material that is unsuitable for them”* (p 7)<sup>101</sup>. In addition to this, the first section of the code gives specific consideration to smoking, and in general; *“The use of [...] smoking [...] must not be featured in programmes made primarily for children unless there is strong editorial justification”* (p 9)<sup>101</sup>, *“must generally be avoided and in any case must not be condoned, encouraged or glamorised in other programmes broadcast before the watershed [...] unless there is editorial justification”*(p 10)<sup>101</sup>, and *“must not be condoned, encouraged or glamorised in other programmes likely to be widely seen or heard by under-eighteens unless there is editorial justification”* (p 10)<sup>101</sup>. Additionally broadcasters must adhere to the watershed which is 9pm<sup>373</sup>, and material unsuitable for children should not, in general, be shown outside of the hours 9pm until 5.30 am. BBFC 18 classified films are not permitted to be broadcast before the watershed.

In contrast to the strict regulation that prohibits the tobacco industry from promoting its products, the alcohol industry can advertise and promote their products relatively freely, with the advertising limitations imposed being mainly through a system of self-governance. There is no legislation in the UK that prohibits alcohol advertising, and alcohol advertising in broadcast media is self-regulated through the voluntary restrictions set out by BCAP<sup>297</sup> <sup>298</sup>. As described above, the content of film and television programmes are controlled by the BBFC and Ofcom respectively.

BCAP<sup>59</sup> states that alcohol advertisements must not; *“be likely to appeal strongly to people under 18, especially by reflecting or being associated with youth culture or showing adolescent or juvenile behaviour”* (section 19: Alcohol)<sup>297</sup> and *“include a person or character whose example is likely to be followed by those aged under 18 years or who has a strong appeal to those aged under 18”* (section 19: Alcohol)<sup>297</sup>. In addition to this they have set some specific rules over the content of the advertisements, such as *they “must not feature in a significant role anyone who is, or seems to be, under 25 and must not feature children”* (section 19: Alcohol)<sup>297</sup>, however this rule is accompanied by an exception whereby advertisements that feature families socialising and drinking sensibly, as long as only those over the age of 25 are seen drinking, then children are allowed to feature in the advertisement. They further make specific reference to the scheduling of alcohol advertisements: *“These may not be advertised in or adjacent to programmes commissioned for, principally directed at or likely to appeal particularly to audiences below the age of 18”*.

For films, there is no legislation or guidance in place to prohibit or limit paid-for alcohol product placement in films, and there is some evidence from 2009 that suggests this is one way that the alcohol industry promotes its products<sup>252</sup>. Alcohol that features in films is treated by the BBFC in a similar manner as tobacco, with the exception that they are only concerned with alcohol

abuse, and no other forms of consumption that feature are directly considered in their guidelines. Their guidance states that where; *"[alcohol abuse] feature[s] to a significant extent in works which appeal to children, this will normally be indicated in the Consumer Advice and/or Extended Classification Information. Classification decisions will also take into account any promotion or glamorisation of such activities."* (p 12 and 13)<sup>315</sup>.

In addition to Ofcom's legal responsibility to ensure *"people who watch television [...] are protected from harmful or offensive material"*<sup>317</sup>, the 9pm watershed, and the code and the section of their code Protecting the Under-Eighteens<sup>101</sup> (details above), Ofcom also makes specific reference to alcohol, but they are specifically concerned with alcohol misuse, as opposed to any other form of consumption. The OBC states: *"The [...] misuse of alcohol must not be featured in programmes made primarily for children unless there is strong editorial justification"* (p 9)<sup>101</sup>, *"must generally be avoided and in any case must not be condoned, encouraged or glamorised in other programmes broadcast before the watershed [...] unless there is editorial justification"*(p 10)<sup>101</sup>, and *"must not be condoned, encouraged or glamorised in other programmes likely to be widely seen or heard by under-eighteens unless there is editorial justification"* (p 10)<sup>101</sup>.

At the time of recording the television broadcasting in this study, paid-for product placement, defined at the time by Ofcom; *"Product placement is the inclusion of, or a reference to, a product or service within a programme in return for payment or other valuable consideration to the programme maker or broadcaster (or any representative or associate of either)"* (p 49)<sup>101</sup>, was prohibited<sup>101</sup>, and although Ofcom now (since 2011) permits paid for product placement within UK television broadcasting, alcohol remain a prohibited product<sup>405 406</sup>. However, it remains that alcohol and other brands are permitted to appear as editorial content if they can be editorially justified<sup>405</sup>. And

additionally, if programmes originate from abroad, then product placement, even for alcohol, is permitted<sup>405 406</sup>.

#### **8.4 Are current restrictions effective?**

Existing controls on direct forms of tobacco advertising, promotion and sponsorship in the UK<sup>64</sup> have generally been effective in reducing exposure to the influences of tobacco marketing<sup>413</sup>, and advertising bans have been shown to be reduce consumption<sup>414</sup>. In addition to this the present study found no commercial advertisements for tobacco on television. This legislation (TAPA) has also banned paid-for product placement in films and television programmes in the UK, in addition to prohibiting actual tobacco advertisements being broadcast on television or on-screen at the cinema, but, as the current research has demonstrated this legislation has not been effective in preventing either the placement of generic smoking, other generic tobacco content, or branded tobacco products from being depicted in films and on television when they are done so for editorial purposes.

There is evidence that the tobacco industry has paid for product placement in films in the past<sup>205 206</sup>, but there is no evidence to suggest that this is still ongoing. It is therefore likely that the reduction seen in this study in films of tobacco and tobacco content is, at least in part, the result of prohibiting paid for tobacco product placements. It is also possible that a reduction in tobacco and tobacco branded appearances in television has also occurred, as in comparison to earlier studies we found fewer episodes of tobacco content. However the results cannot be directly compared due to differences in methods. It can therefore be said that TAPA has been effective in what it set out to do, which in part was to end the practice of paid for tobacco product placement. Having said this it has not resulted in the removal of all tobacco and tobacco

branded imagery from film and television, and does not therefore comprehensively protect children and young people from exposure to the potentially hazardous gratuitous tobacco content and tobacco branding that persist in films and on television.

In a similar manner, the MSA<sup>290</sup> in the US has reduced paid-for product placement of tobacco brands in US films and US television programmes<sup>227</sup>. However it could be said that it has been less effective as TAPA as not all tobacco manufacturers were signatories of the agreement<sup>290</sup>. However, as US films dominate the highest money making films at the UK cinema box office, and are therefore popularly viewed in the UK, it is likely to have been a contributing factor in the reduction of tobacco and tobacco branding seen in films over the years investigated here. As with TAPA, it appears to have had at least some success in reducing tobacco brand appearances in films, however it has not prevented either generic tobacco content, or branded tobacco appearances in films or in television programmes that have been included for either artistic or editorial purposes, or the resulting effects that these appearances have on young audiences who view them.

As the study has documented that tobacco and tobacco branding are still present in films, and still present in films rated by the BBFC as suitable for children and young people to view, it appears that the current guidance provided to film makers is insufficient, and the current rating system is not protecting children and young people from a potentially harmful exposure. In contrast with TAPA and other legislation, the BBFC guidance uses very vague and subjective language which makes it unclear how or when tobacco content in film will be considered in classification decisions, or how it would effect a films classification. For example, where in the BBFC guidance it states in relation to smoking *“Classification decisions will also take into account any promotion or glamorisation of such activities”* (p 12 and 13)<sup>315</sup>, there is no definition or criteria

provided for what will be considered either promotion or glamorisation, or how, if this was considered to have occurred, it would be classified.

Television advertising of tobacco has been prohibited through TAPA. The present study of prime-time television found that the *any tobacco* coded category appeared in few advertisements/trailers (2.6%), and in less than 1% of advertising/trailer intervals, several of which were for smoking cessation products, and none of the actual tobacco use coded category occurred in any commercial advertisements. Therefore it appears that in conjunction with TAPA, BCAP has successfully limited the inclusion of tobacco and smoking in television advertising.

Ofcom, in contrast to the BBFC guidance, appears to have been more successful in protecting children and young people from tobacco content being shown on-screen, as there were far lower proportions of television programmes (34%) containing tobacco than there were films (70%). Also, much of the tobacco content broadcast in television programming was the result of the feature films broadcast, with 65% of feature films shown on television containing reference to tobacco. As proportionally there were significantly more episodes of tobacco shown after the watershed (3.65%), than before (2.65%), it appears that the watershed is having at least some effect in protecting children and young people from the tobacco imagery broadcast. Having said this, there were still 505 episodes of tobacco shown before the watershed during prime-time television broadcasting. Also in Ofcom's broadcasting code they use similar vague and subjective language as used by the BBFC. For example in the code it states *"The use of [...] smoking [...] must not be featured in programmes made primarily for children unless there is strong editorial justification"* (p 9)<sup>101</sup>, yet there is no explanation of when smoking or other tobacco content is considered to be editorially justified, what criteria would be used to determine editorial justification, or who decides if it is justified editorially. However they do state

that it must generally be avoided before the watershed, and must not be condoned, encouraged or glamorised. This might to an extent explain why there is less tobacco seen in television programmes as there is in films. Given that there was less tobacco content broadcast before, than after the watershed, it would appear that this guidance is to an extent being implemented effectively.

This study showed that nearly forty percent (37%) of all advertisements/trailers contained alcohol, and occurred every six minutes of advertising/trailers broadcast. In respect of alcohol advertising, BCAP's code<sup>59</sup> makes several references to what is not permitted in the content of the advertisement, however the methods used here did not allow for the coding of contextual factors within each interval or advertisement/trailer so it is not possible to comment on whether or not any or every advertisement adhered to this part of the BCAP rules. However, in addition to the context of the advertisement, BCAP also makes reference to the scheduling of alcohol advertisements. Given that the present study content coded television broadcast during prime-time television, and was compiled of broadcasting from predominantly before the watershed (3 hours), than after (1 hour), it could be questioned whether BCAP are implementing their rule on appropriate scheduling.

There are currently very few controls over the inclusion of alcohol in films, paid for or otherwise, even in films suitable for children and young people, and the BBFC are only concerned about the inclusion of alcohol abuse behaviours, and the promotion or glamorisation or alcohol being featured in films suitable for children and young people. As with tobacco, where the BBFC state that "*Classification decisions will also take into account any promotion or glamorisation of such activities*" (p 12 and 13)<sup>315</sup>, they do not make clear what will be considered as promotion or glamorisation, or how if detected this would affect the classification of the film. Given that there are currently very high levels of alcohol (86%) and alcohol branding (35%) in films, even in films rated as

suitable for children and young people to view it would appear that the absence of any clear restrictions or guidance on alcohol and alcohol branding in films rated as suitable for children and young people needs to be addressed.

Alcohol was seen more frequently in television programmes than tobacco, and less frequently than alcohol in films; 52% of programmes and 12% of intervals contained alcohol, 21% of programmes featured at least one brand appearance, and alcohol intervals were equally likely to appear before as after the 9pm watershed. Ofcom, similarly to the BBFC, primarily makes reference to alcohol misuse and their reference to other alcohol use behaviours, is vague and relies on subjective language, saying that it should "*generally*" be avoided before the watershed, unless there is editorial justification. They do however state, as they did with tobacco, that it must not be condoned, encouraged or glamorised. As with tobacco, this might to an extent explain why there is less alcohol shown on television, than there is in films, yet having said this, there was no difference in the amount of alcohol shown before as after the watershed, indicating that there could be an alternative reason. One possible alternative explanation is that the genres of television programmes broadcast, including many documentaries and news broadcasting, are far more varied than those of film, where for the most part content is purely fictional. Another reason could be that programmes including product placement produced abroad are permitted to be shown on UK television, even if they have paid-for alcohol product placements.

## **8.5 What the industries say**

### ***8.5.1 What the tobacco industry says***

According to the WHO's Tobacco Atlas<sup>291</sup>, (Chapter 14, Tobacco Companies, p 50), the world's three largest international tobacco manufacturers are Philip

Morris (PM)(market share 16.4%, revenue \$47.1bn), British American Tobacco (BAT)(15.4%, \$31.1bn), and Japan Tobacco International (JTI)(7.2%, \$21.6bn). Given that these three companies collectively cover 39% of the market share in tobacco, their advertising and marketing policies will be considered here. The brands that were most frequently identified in films were *Marlboro* (PMI) and *Silk Cut* (JTI). And the brands that featured most commonly on television were *Mayfair* (JTI) and *Silk Cut* (JTI).

According to PM's website<sup>292</sup> the company supports youth prevention efforts including effective regulation, retail access, and educational programmes. They claim to market and sell to adults only, yet also state that they "*do not agree that marketing causes people to smoke*" (PM webpage)<sup>292</sup>, and in respect of placement in film and television media they claim that they "*do not engage in product placement in movies or on television—in fact, [they] routinely decline all such requests*" (PM website)<sup>292</sup>.

On BAT's website<sup>293</sup> they make the claim that they operate responsibly, that they do not advertise to young people, and where they are permitted to advertise they have strict criteria of what will be excluded, such as celebrity endorsement, anyone under the age of 25, and messages that appear to suggest that tobacco use is widespread. Also, in the case of cinema, television, radio or film advertising they state that "*there is to be no direct or indirect payment or contribution for the placement of tobacco products, advertisements or items bearing tobacco product branding within the body of any Motion picture; Television programme [...] where such medium is intended for the general public*" (BAT website)<sup>293</sup>.

JTI's website<sup>294</sup> also states that they do not advertise to children, and that they advertise exclusively "*to maintain brand loyalty; to encourage smokers of competitor brands to switch to [their] products; and to provide information*

*about [their] products to adult consumers” (JTI website)<sup>294</sup>. In their marketing standards, they claim exactly as BAT has done in regard to product placement; that there’s no direct or indirect payment made.*

As can be seen from the above, the tobacco industry claims to advertise their products only to adult audiences, and although they claim not to be involved in product placement activities in either film or television, they are similarly not claiming to prevent the placement of their brands in films and broadcast media that are not paid for, even when they are placed in media that is aimed at, or unrestricted to children and young people’s viewership. Given that the results here show that tobacco and tobacco branding feature in both films and television broadcasts that are rated as suitable for, and broadcast at times considered suitable for children and young people to view, it shows that the tobacco industry is not preventing their products from appearing in films.

### **8.5.2 What the alcohol industry says**

The brands to feature most frequently in film were *Budweiser* and *Miller*, and the brands to feature most frequently on television were *Heineken*, *Budweiser*, and *Carlsberg*. The companies that operate these four brands (*Budweiser*, *Miller*, *Heineken*, and *Carlsberg*), and what their advertising and marketing policies advocate will be considered here.

The code of commercial communications for *Budweiser*, owned by *InBev* in the UK (InBev webpage)<sup>308</sup>, states that they “*want to ensure that [their] commercial communications are directed only at those above the legal drinking age*” (p 4)<sup>308</sup>, “*they will aim to place [...] marketing materials in [...] broadcast media where, on average, a minimum of 70% of the target audience for that media is reasonably expected to be above the legal drinking age*”, and they “*will*

*not sponsor or target [...] marketing activities at events where the majority of the audience is expected to be below the legal drinking age” (p 6)<sup>308</sup>.*

SabMiller is the company that owns the *Miller* beer brands, and in their policy on commercial communication<sup>415</sup> state that when they market their products they do not do so with the intention of having any appeal to those under the legal drinking age, and that *“Commercial communication may only be placed in print, radio or television, on any form of digital media including the internet, or in text messaging where at least 70% of the audience is reasonably expected to be of legal drinking age (or 18 if no legal drinking age). A placement will be considered reasonable if the audience composition data reviewed prior to the placement satisfied the placement criteria and was the best available data for that medium at that time” (p 4)<sup>415</sup>.*

*Heineken*<sup>310</sup>, claim on their webpage to be the UK’s leading beer and cider business with a market share of almost 30%. In their corporate responsibility strategy they state that their brands *“will not be placed in, or on, media directed primarily at under 18’s”* and they will *“not promote...[Heineken brands]...in media, events or programmes where the majority of the audience are known to be under 18”* (Heineken webpage)<sup>311</sup>.

*Carlsberg Group*<sup>408</sup> claim that they *“should never address marketing communications specifically to minors [...], promote brands in the media, events, or programmes where more than 30% of the audience is known to be minors”* (p 3)<sup>408</sup>, and they also *“should avoid using themes or treatments with particular appeal to minors, featuring celebrities with particular appeal to minors, or likely to be regarded by them as role models”* (p 3)<sup>408</sup>.

Despite each of the companies advocating that they do not promote their products to children and young people, their brands are still appearing in popular films rated as suitable for their viewing and programmes broadcast before the

9pm watershed which is considered a scheduling time suitable for the under 15s to watch. As the alcohol industry has not been required to publish their internal documents, as the tobacco industry has, there is little available information on whether and how frequently the alcohol industries place their products in films and on television, and if they do, which films and which programmes. As previously mentioned, there is evidence that the alcohol industry has, at least in the recent past, paid for product placements in films<sup>252</sup>, so it is likely that it is still on-going, but the extent is unknown.

## **8.6 What should be done?**

Given the current evidence on the effects on children and young people of being exposed to tobacco and alcohol imagery in films and in television broadcasting, measures need to be put in place to provide reasonable protection from these potentially hazardous exposures. The impression formed while carrying out this work has been that whilst some smoking and alcohol use in films and on television appears to be justified on artistic or factual grounds, the great majority is not. There has been a lot of debate over what the most effective and appropriate ways of tackling such imagery in productions, particularly so for tobacco imagery in feature films.

Previous researchers<sup>196 199 416 417</sup> have suggested that tobacco content portrayed in films should be restricted to adult only audiences, and this is supported by the World Health Organisation<sup>418</sup>, The National Cancer Institute<sup>419</sup>, and the British Medical Association<sup>420</sup>. Sockwell and Glantz<sup>211</sup> have suggested that anti-smoking advertisements should be shown preceding any film containing smoking, as this has been shown to be effective in “immunising” the effects of on-screen smoking depictions<sup>202</sup>, and additionally Sockwell and Glantz<sup>211</sup> argue that all those involved in film making should certify that they have not had any

tobacco industry payment, or any alternative payment-in-kind, for the inclusion of tobacco in films. Sargent *et al*<sup>421</sup> suggests that voluntary measures, such as the US age classification system, would be sufficient at reducing the tobacco and smoking content in youth rated films and such measures would not violate free speech, which he believes legislation or regulation would be in danger of doing. This is an opinion echoed by others in the US<sup>224</sup>, and Shields *et al*<sup>422</sup> suggest that there is a need to work directly with the film industry. Yet, given the differences between the US and the UK age classification systems, with the UK age classification system not being voluntary as is the case in the US, this option of voluntary restriction would be inappropriate. Furthermore, there is evidence from other areas of tobacco control that voluntary bans and restrictions are ineffective<sup>423-425</sup>.

Chapman<sup>426 427</sup> disagrees with age restricting films with tobacco content, and argues that banning film smoking would be a threat to freedom of expression, and would "*airbrushing out reality*" (p 363)<sup>426</sup>. It cannot be disputed that smoking scenes are present in other media, such as television, and in wider society generally. The present study has shown that the occurrence of smoking on television is far more infrequent than in films, and many of the occurrences on television are the result of feature films broadcast on television. Whilst it might be unrealistic to think that eliminating every exposure of children and young people to smoking imagery would be possible, the removal of film smoking could remove one significant influence easily, and cost effectively, through the inclusion of smoking in the BBFC age classification process.

Fewer discussions, at least publicly, have been had regarding alcohol content in films, however some earlier researchers have suggested that both tobacco and alcohol content in G-rated (US equivalent to UK U) films should be eliminated<sup>218</sup>. Stern<sup>257</sup>, in respect to smoking, drinking and drug use content, suggests that the film industry should endeavour to provide more responsible

messages to their young audiences, Aina and Olorunshola<sup>220</sup> suggest that substance use, including both tobacco and alcohol, in films should be censored, while Everett *et al*<sup>209</sup> suggests more consideration is needed over what should be done.

In the case of television, Long *et al*<sup>265</sup> suggest that substance portrayals on television should remain unchanged and that instead of putting the responsibility on the producers and broadcasters, it should be the parents responsibility. They<sup>265</sup> suggest parents should be encouraged to limit their children's daily television viewing time, should be more involved with their children's programme selection, and should teach their children critical viewing skills to counteract the effects of substance use in television programming. While Sone's<sup>238</sup> suggests that most smoking depictions could be removed without having any detrimental effect on the storyline, as many of the smoking depictions have no link with the storyline.

One group of researchers<sup>410</sup> have suggested that alcohol advertising on UK television should be restricted to after the 9pm watershed. Another<sup>323</sup> argues that self-regulatory systems for alcohol advertising are ineffective, and stronger regulation, or legislation, is required. For alcohol content in programmes, Breed and DeFoe<sup>236</sup> argue that censoring alcohol imagery from television productions is inappropriate, but suggest that educating media personnel *"to make informed decisions about alcohol materials without damaging entertainment values"* (p269)<sup>236</sup> would be a preferable option, while Singer<sup>404</sup> suggests that an education campaign to counteract the impact of the media would be appropriate. Smith *et al*<sup>269</sup> recommends that more realistic portrayals of drinking should be shown, such as not exaggerating the amount of drinking in society, portray the consumption of non-alcoholic drinks more often, and showing the social and health consequences of alcohol consumption. Klein<sup>411</sup> suggests that policies need to be implemented to restrict alcohol advertising at televised sporting events.

The recommendations from carrying out the current research would be that further restrictions are required on the depiction of both tobacco and alcohol content. For tobacco displayed in films, given that the effects of smoking are undeniably harmful and that there is extensive findings demonstrating that tobacco imagery and other content in films influences many children and young people to experiment, initiate and ultimately become smokers, it would be reasonable that all gratuitous depictions of smoking, tobacco branding and other tobacco content in films be rated as unsuitable for children and young people to view.

Similarly for the portrayal of tobacco occurrences on television, again the harmful effects of smoking are undeniable. Although there is limited information on the effects of tobacco imagery and other tobacco content being shown on television and the subsequent effects of children's smoking uptake, it is likely to have at least a similar effect as the depictions in film, if not to a greater extent due to repeated and more frequent viewing, so it will also be suggested here that gratuitous depictions on television should also be rated exclusively for adult audiences. In addition it is recommended that further research be conducted to determine the effects of tobacco content in television broadcasting on young viewers' smoking behaviours.

The recommendations for alcohol in both films and on television will be slightly different due to the differences in the nature of the products. Alcohol use in the UK (as opposed to abuse or misuse) is something that most people do, it features commonly in the urban environment with bars, pubs and other alcohol retailers, it plays a key cultural role in society, and it is widely accepted by broad public opinion as a socially acceptable behaviour.

For the inclusion of alcohol in films there is a known relationship between the exposure to alcohol imagery in films and the use of alcohol by underage

young people. Due to this, this study suggests that alcohol imagery should be afforded greater consideration in determining the suitability of films for viewing by children and young people. Whilst the total exclusion of all alcohol imagery and other alcohol content from films rated suitable for children and young people is likely to result in an unrealistic and unrepresentative picture of society, excessive amounts of gratuitous content, content in films rated suitable for very young children, content that is portrayed unrealistically, and excludes any indication of the injurious or harmful consequences of certain drinking behaviours should be considered for higher age classification.

Alcohol on television needs to be considered separately for advertising and for programme content. There is considerable evidence that alcohol advertising and marketing practices increase alcohol consumption among young people, and for this reason alcohol advertising ought to be banned from broadcasting before the 9pm watershed. In addition to this, secondary advertising, such as alcohol branding appearing in sporting events, should be prohibited due to the known adverse effects on drinking behaviour<sup>428 429</sup> Alcohol featuring in general television broadcasting ought to be given the same consideration as the alcohol content in film, and greater consideration should be given to its suitability for broadcast before the 9pm watershed.

In summary, gratuitous tobacco content in films should be classified by the BBFC as suitable for adult only audiences. Gratuitous tobacco content in television programmes should not be considered as suitable for broadcasting before the 9pm watershed. Direct alcohol advertising should be limited for broadcast only after the 9pm watershed. Secondary advertising, such as the sponsorship of sporting events, should be prohibited from television broadcasting, and alcohol content in films and television should be given greater consideration in the BBFC age classification categories suitable for children and young people.

## 8.7 Communication with governing bodies

After the publication of our study on tobacco content in popular films in the UK<sup>401</sup> we wrote to the British Board of Film Classification (BBFC) suggesting that current practice was failing to protect children from this particularly harmful imagery. The BBFC responded that their guidelines were *"proportionate; take due account of the available evidence of harm; and reflect the clear wishes of the public"*, citing data from a recent public consultation<sup>430</sup>, and pointing out that *"any film which could potentially cause harm through encouraging smoking through tobacco imagery would be awarded an appropriate, restrictive classification."*

At a subsequent meeting however, a senior BBFC policy advisor was unable to name a film for which this had occurred. He also advised us that any change to current practice would be likely to provoke powerful opposition from the film industry, and was therefore unlikely to occur in the absence of public complaint, or a directive from the Department for Culture, Media and Sport (DCMS), the government department that sets the fees that the BBFC charges for its services. We requested a meeting with DCMS to explore their position and were refused, in a letter stating that *"[DCMS] believe that current safeguards are already fit for purpose"*<sup>431</sup>.

We additionally wrote to the Film Distributors Association (FDA), and the Chief Executive responded; *"To my knowledge, though, smoking is not 'commonplace' today in films intended for younger viewers"*<sup>432</sup>. At a subsequent meeting it was suggested that at least part of the reason tobacco remains common place in films aimed at young people is a lack of knowledge and awareness of its effects among those working in the film industry.

## **8.8 What needs to be done to achieve this?**

For the issue of tobacco in film, our communications with the BBFC and the DCMS indicate that there is little inclination among UK regulators to change current practices. It became evident that regardless of the existing evidence, further evidence is needed to persuade politicians and policymakers that this is a problem that deserves further attention. It also became clear that there is little public concern over this issue and that in absence of public concern, political change is unlikely.

Therefore, before any real changes can occur in the current UK film rating system it will be necessary to carry out further work to address some of the gaps raised by politicians and the BBFC. First it needs to be demonstrated that that children and young people actually notice tobacco in film. Secondly, it needs to be determined whether the general public is aware of the risks of exposure to smoking in film, and whether, once aware, they would support measures to protect children from exposure. Thirdly, it is needs to be determined whether the high prevalence of smoking in UK films arises from tobacco industry influence, rather than the cultural integrity of the film.

Many of the appearances of tobacco on television would disappear from prime-time television broadcasting if gratuitous tobacco depictions in films rated for children and young people were prohibited, as many of the depictions of tobacco on television occur through feature films being broadcast on television, and Ofcom do not allow the broadcasting of adult rated films before the 9pm watershed. Although it is likely that the depiction of tobacco on television viewed by children and young people is likely to encourage smoking experimentation and initiation, further research needs to be carried out to establish this irrefutably. Nonetheless, Ofcom should give greater consideration to the tobacco

depictions broadcast, and prohibit those that are gratuitous being broadcast before the 9pm watershed.

For alcohol in film, further research needs to be carried out to establish the effect of alcohol content in film on young audiences. As each of the alcohol companies' marketing, advertising and communications policies state that they do not market their products to underage people, and there is evidence from the recent past that they have paid for their products to feature in films rated as suitable for youth audiences, evidence needs to be sought to ensure that they are indeed implementing their own policies, and the practice of paid for alcohol placement in films aimed at young audiences needs to be ended. As the marketing in the alcohol industry is self-governing, the alcohol companies also need to take more responsibility when their branded products feature in films for young people, even if it is unpaid for. Additionally, the BBFC needs to afford greater consideration to the inclusion of alcohol imagery in films classified for young audiences.

In addition to the further evidence required above, it will also be necessary to determine the effects of children and young people's exposure to alcohol imagery and other content on television and their subsequent drinking behaviours. As there is currently existing evidence of the effects of alcohol marketing and advertising on young people's drinking behaviours, this type of advertising should be limited for broadcasting only after the 9pm watershed. The indirect advertising that occurs through the broadcasting of sporting events should be prohibited. Alcohol content in television programmes broadcast before the 9pm watershed should be given greater consideration by Ofcom.

## 8.9 Conclusions

In summary this research has shown that tobacco and alcohol content are commonly shown on television as well as in films, and that they are shown at times and in rating categories that are considered suitable for children and young people to view them. This research has documented the occurrence of tobacco and alcohol in films popular in the UK for the first time. The results fit in with the existing research from other countries and suggest that although tobacco content is reducing, alcohol is not. This study has also been the most recent and comprehensive investigation of tobacco and alcohol content on UK television in the UK, and has shown that although tobacco and alcohol regularly feature in UK television broadcasting, they are less frequent than in films, and predominantly concentrated in specific genres.

Current regulation has been effective in removing tobacco advertising from being seen on-screen, and the current self-regulatory system in the UK for alcohol advertising does not appear to be as effective. The BBFC age classification system does not protect children and young people from the tobacco or alcohol content or branding in films rated as suitable for them to view. Probably due to tobacco legislation rather than their own regulations, BCAP has ensured that there is no tobacco advertising shown on television. However as there are a large proportion of alcohol advertisements still shown on television at peak-time (prime-time) viewing when many children and young people are likely to be viewing BCAP seem to have had less success. As there is less tobacco and alcohol shown on television than in films it would suggest that Ofcom has been more successful at removing tobacco and alcohol content from young viewers, yet this is not the case for all genres shown on television, and although there is less tobacco shown before the watershed than after, this is not the case for alcohol.

Both the tobacco and alcohol industry claim that they do not market, advertise, or promote their products to children and young people, however their products remain depicted in popular films and television programmes, with alcohol advertising additionally being featured before the 9pm watershed.

Tobacco in films rated as suitable for children and young people needs to be removed, with depictions receiving an adult rating. Although further research needs to be carried out, tobacco on television should not be featured before the 9pm watershed. If the practice is still ongoing, the alcohol industry needs to stop paid for product placement in films and television that are rated as suitable for youth audiences. Alcohol advertising needs to be limited until after the 9pm watershed, and indirect advertising through broadcast sporting events needs to be prohibited. Again, although further research is required to determine the full effect of alcohol imagery in films and on television, the BBFC ought to give alcohol content in films rated as suitable for children and young people greater consideration, and Ofcom ought to give alcohol content in television programmes greater consideration when they are broadcast before the 9pm watershed.

In order for any of the above recommendations to be achieved, it will be necessary to carry out further research to provide the evidence necessary for changes to occur. Once the evidence is available, it will be harder for the government and other policy makers to avoid taking action to prevent or limit the exposure of children and young people from these two potentially harmful exposures.

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## 10. Appendices

## Appendix 1: Fifteen top grossing films each year at the UK cinema box office 1989-2008:

### 1989

1. INDIANA JONES-THE LAST CRUSADE
2. BATMAN
3. SHIRLEY VALENTINE
4. BACK TO THE FUTURE 2
5. RAIN MAN
6. GHOSTBUSTERS 2
7. THE NAKED GUN
8. LICENCE TO KILL
9. DEAD POETS SOCIETY
10. LETHAL WEAPON 2
11. TWINS
12. WHEN HARRY MET SALLY
13. COCKTAIL
14. SEE NO EVIL, HEAR NO EVIL
15. THE ACCUSED

### 1990

1. GHOST
2. PRETTY WOMAN
3. HOME ALONE
4. LOOK WHO'S TALKING
5. HONEY, I SHRUNK THE KIDS
6. TOTAL RECALL
7. BACK TO THE FUTURE 3
8. GREMLINS 2: THE NEW BATCH
9. THE WAR OF THE ROSES
10. PARENTHOOD
11. DIE HARD 2
12. TEENAGE MUTANT NINJA...(1990)
13. PRESUMED INNOCENT
14. DICK TRACY
15. THE LITTLE MERMAID

### 1991

1. ROBIN HOOD: PRINCE OF THIEVES
2. TERMINATOR 2: JUDGMENT DAY
3. THE SILENCE OF THE LAMBS
4. THREE MEN AND A LITTLE LADY
5. DANCES WITH WOLVES
6. THE ADDAMS FAMILY
7. SLEEPING WITH THE ENEMY
8. THE NAKED GUN 2-1/2
9. KINDERGARTEN COP
10. THE COMMITMENTS
11. HOT SHOTS
12. ARACHNOPHOBIA
13. LOOK WHO'S TALKING TOO
14. HIGHLANDER 2: THE QUICKENING
15. BACKDRAFT

### 1992

1. THE BODYGUARD
2. BASIC INSTINCT
3. HOME ALONE 2: LOST IN NEW YORK
4. HOOK
5. LETHAL WEAPON 3
6. BEAUTY AND THE BEAST
7. BATMAN RETURNS
8. CAPE FEAR
9. SISTER ACT
10. WAYNE'S WORLD
11. MY GIRL
12. THE HAND THAT ROCKS THE CRADLE
13. JFK
14. BEETHOVEN
15. FATHER OF THE BRIDE

### 1993

1. JURASSIC PARK
2. ALADDIN
3. THE FUGITIVE
4. INDECENT PROPOSAL
5. BRAM STOKER'S DRACULA
6. SLEEPLESS IN SEATTLE
7. CLIFFHANGER
8. A FEW GOOD MEN
9. THE JUNGLE BOOK (RE: 93)
10. FOREVER YOUNG
11. IN THE LINE OF FIRE
12. THE FIRM
13. SOMMERSBY
14. ADDAMS FAMILY VALUES
15. DEMOLITION MAN

### 1994

1. FOUR WEDDINGS AND A FUNERAL
2. THE LION KING
3. MRS. DOUBTFIRE
4. THE FLINTSTONES
5. THE MASK
6. FORREST GUMP
7. SCHINDLER'S LIST
8. TRUE LIES
9. PULP FICTION
10. SPEED
11. PHILADELPHIA
12. COOL RUNNINGS
13. WAYNE'S WORLD 2
14. MIRACLE ON 34TH STREET
15. THE SPECIALIST

**1995**

1. BABE
2. BATMAN FOREVER
3. GOLDENEYE
4. CASPER
5. BRAVEHEART
6. APOLLO 13
7. INTERVIEW WITH THE VAMPIRE
8. POCAHONTAS
9. ACE VENTURA: WHEN NATURE CALLS
10. DIE HARD WITH A VENGEANCE
11. STARGATE
12. DUMB AND DUMBER
13. WATERWORLD
14. DISCLOSURE
15. MURIEL'S WEDDING

**1996**

1. INDEPENDENCE DAY
2. TOY STORY
3. 101 DALMATIANS
4. SEVEN
5. MISSION: IMPOSSIBLE
6. TWISTER
7. EVITA
8. SENSE AND SENSIBILITY
9. JUMANJI
10. TRAINSPOTTING
11. THE NUTTY PROFESSOR
12. THE HUNCHBACK OF NOTRE DAME
13. MATILDA
14. STAR TREK: FIRST CONTACT
15. HEAT

**1997**

1. THE FULL MONTY
2. MEN IN BLACK
3. THE LOST WORLD: JURASSIC PARK
4. TOMORROW NEVER DIES
5. BEAN
6. STAR WARS (RE:97)
7. BATMAN & ROBIN
8. RANSOM
9. THE ENGLISH PATIENT
10. LIAR LIAR
11. SPACE JAM
12. HERCULES
13. SPICEWORLD THE MOVIE
14. SLEEPERS
15. JERRY MAGUIRE

**1998**

1. TITANIC
2. DOCTOR DOLITTLE
3. SAVING PRIVATE RYAN
4. ARMAGEDDON
5. GODZILLA
6. THERE'S SOMETHING ABOUT MARY
7. SLIDING DOORS
8. LOCK STOCK TWO SMOKING BARRELS
9. ENEMY OF THE STATE
10. FLUBBER
11. ANTZ
12. LOST IN SPACE
13. DEEP IMPACT
14. THE TRUMAN SHOW
15. MULAN

**1999**

1. STAR WARS EP.1: PHANTOM MENACE
2. NOTTING HILL
3. A BUG'S LIFE
4. THE WORLD IS NOT ENOUGH
5. THE SIXTH SENSE
6. AUSTIN POWERS 2
7. SHAKESPEARE IN LOVE
8. TARZAN
9. THE MUMMY
10. MATRIX
11. THE BLAIR WITCH PROJECT
12. AMERICAN PIE
13. THE RUGRATS MOVIE
14. EAST IS EAST
15. INSPECTOR GADGET

**2000**

1. TOY STORY 2
2. GLADIATOR
3. CHICKEN RUN
4. AMERICAN BEAUTY
5. BILLY ELLIOT
6. STUART LITTLE
7. MISSION: IMPOSSIBLE 2
8. MEET THE PARENTS
9. THE GRINCH
10. X-MEN
11. DINOSAUR
12. WHAT LIES BENEATH
13. THE BEACH
14. CHARLIE'S ANGELS
15. SNATCH

**2001**

1. HARRY POTTER PHILOSOPHER'S STO
2. LORD OF THE RINGS: FELLOWSHIP
3. BRIDGET JONES' DIARY
4. SHREK
5. CATS AND DOGS
6. HANNIBAL
7. THE MUMMY RETURNS
8. MOULIN ROUGE
9. JURASSIC PARK 3
10. AMERICAN PIE 2
11. WHAT WOMEN WANT
12. PLANET OF THE APES
13. CAST AWAY
14. PEARL HARBOR
15. LARA CROFT: TOMB RAIDER

**2002**

1. LORD OF THE RINGS: TWO TOWERS
2. HARRY POTTER CHAMBER SECRETS
3. MONSTERS, INC.
4. STAR WARS: EP.II-ATTACK CLONES
5. DIE ANOTHER DAY
6. SPIDER-MAN: THE MOVIE
7. OCEAN'S ELEVEN
8. AUSTIN POWERS IN GOLDMEMBER
9. SCOOBY-DOO
10. MEN IN BLACK 2
11. MINORITY REPORT
12. ABOUT A BOY
13. CHICAGO
14. SIGNS
15. ICE AGE

**2003**

1. LORD OF THE RINGS: RETURN KING
2. FINDING NEMO
3. LOVE ACTUALLY
4. THE MATRIX RELOADED
5. THE PIRATES OF THE CARIBBEAN  
(Curse of the black pearl)
6. BRUCE ALMIGHTY
7. X-MEN 2
8. CALENDAR GIRLS
9. JOHNNY ENGLISH
10. TERMINATOR 3: RISE OF MACHINES
11. THE MATRIX REVOLUTIONS
12. AMERICAN PIE: THE WEDDING
13. ELF
14. CATCH ME IF YOU CAN
15. TWO WEEKS NOTICE

**2004**

1. SHREK 2
2. HARRY POTTER PRISONER AZKABAN
3. BRIDGET JONES: EDGE OF REASON
4. THE INCREDIBLES
5. SPIDER-MAN 2
6. THE DAY AFTER TOMORROW
7. SHARK TALE
8. I, ROBOT
9. TROY
10. SCOOBY-DOO 2
11. VAN HELSING
12. LEMONY SNICKET'S A SERIES...
13. STARKY & HUTCH
14. POLAR EXPRESS
15. THE LAST SAMURAI

**2005**

1. HARRY POTTER GOBLET OF FIRE
2. THE CHRONICLES OF NARNIA:...
3. STAR WARS: EP.III-REVENGE SITH
4. CHARLIE AND THE CHOCOLATE...
5. WALLACE & GROMIT: THE CURSE...
6. WAR OF THE WORLDS
7. KING KONG
8. MEET THE FOCKERS
9. MADAGASCAR
10. HITCH
11. NANNY MCPHEE
12. BATMAN BEGINS
13. PRIDE AND PREJUDICE
14. MR. AND MRS. SMITH
15. WEDDING CRASHERS

**2006**

1. CASINO ROYALE
2. PIRATES OF THE CARIBBEAN: DEAD
3. THE DA VINCI CODE
4. ICE AGE II
5. BORAT
6. NIGHT AT THE MUSEUM
7. X-MEN 3
8. HAPPY FEET
9. CARS
10. SUPERMAN RETURNS
11. MISSION: IMPOSSIBLE 3
12. THE DEVIL WEARS PRADA
13. CHICKEN LITTLE
14. OVER THE HEDGE
15. THE DEPARTED

**2007**

1. HARRY POTTER ORDER OF PHOENIX
2. PIRATES OF THE CARIBBEAN: AT..
3. SHREK THE THIRD
4. THE SIMPSONS
5. SPIDER-MAN 3
6. THE GOLDEN COMPASS
7. I AM LEGEND
8. RATATOUILLE
9. THE BOURNE ULTIMATUM
10. TRANSFORMERS
11. MR. BEAN'S HOLIDAY
12. HOT FUZZ
13. ENCHANTED
14. STARDUST
15. 300

**2008**

1. MAMMA MIA!
2. QUANTUM OF SOLACE
3. THE DARK KNIGHT
4. INDIANA JONES & THE KINGDOM...
5. SEX AND THE CITY
6. HANCOCK
7. MADAGASCAR: ESCAPE 2 AFRICA
8. WALL-E
9. HIGH SCHOOL MUSICAL 3
10. KUNG FU PANDA
11. IRON MAN
12. CHRONICLES OF NARNIA: PRINCE..
13. THE MUMMY: TOMB OF THE  
DRAGON..
14. TWILIGHT
15. SWEENEY TODD