The Application of Social Marketing in Reducing Binge Drinking among Female College Students: An Investigation of a Third Level College in Cork

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The Application of Social Marketing in Reducing Binge Drinking among Female College Students: An Investigation of a Third Level College in Cork

Cork Institute of Technology
Department of Management and Marketing
School of Business
Submission for the Award of MBus

By
Fergus Murphy

September 2009

Research Supervisor – Mr Maurice Murphy
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Acknowledgements

I wish to express my sincere thanks to the following people without whom this research would not have been possible.

My thanks to all the staff in the Management and Marketing Department in Cork Institute of Technology for making the past 2 years a challenging yet quite enjoyable one. I would like to thank all my fellow post grads in D247 and a special mention to Hobbs, Mahony and Barry for all the banter throughout the 2 years.

To Brian McGrath, for allowing me the opportunity to pursue this study and continue my studies here in CIT.

I would like to thank all the participants in the focus groups conducted for their cooperation and input into this study and to Professor Joe Barry and Professor Patrick Wall for their time and expertise.

I would also like to pay tribute to my wonderful parents, James A. and Eileen, for their constant support and belief in me throughout the years, even though James A still doesn’t know what my thesis is on!!!!! Also to my two brothers, James Anthony and Conor, and sister Una for all the friendly abuse over the years!!

I am also extremely grateful to all my friends who have been there for me over the years. From all the Halldene crew, football and school friends, without you all I wouldn’t know where I would be.

Finally, to the man who made this study a possibility, Maurice Murphy. I really can’t find the words to do this man the justice that he deserves. For his continuous dedication to my work and career but also for being there for me as a friend, Maurice, I am eternally grateful to you for all you have done for me thus far!!
Abstract

Ireland has one of the highest levels of alcohol consumption in the EU, consuming 10.6 litres of pure alcohol per person in 2003, increasing to 13.4 litres in 2006. This rise in consumption has led to increases in alcohol-related harm and disease, and has resulted in more than 1,775 deaths according to the Health Research Board (Mongan et al., 2007). In general, increases in overall consumption are accompanied by a greater incidence of health and social problems. In addition to the high volume of alcohol consumed by people in Ireland, drinking occasions appear to be strongly related to heavy episodic or “binge” drinking patterns. Binge drinking is defined as drinking five or more drinks in a row for men and four or more drinks in a row for women, at least once in the previous two weeks.

A recent international study of drinking among university students in 21 countries found that Ireland has the highest proportion of both male and female heavy and binge drinkers (Dantzer et al., 2006). In the study, 49% of Irish third level males and 57% of Irish third level females were classified as heavy drinkers. Women metabolise alcohol differently from men and have higher blood alcohol concentrations for a given volume of alcohol consumed. Therefore, the risks associated with alcohol are amplified for women. With regard to overall health effects, it is important to note that women are at increased risk from alcohol use because they need less alcohol per kilogram of body weight than men, to attain the same peak blood alcohol level and level of impairment.

The current author’s research is of an investigative nature and sets out to analyse the application of social marketing in reducing binge drinking among female college students. Through the use of focus groups, the students interviewed assessed various physical and social threat appeals. These focus groups revealed that physical threat appeals are more effective than social threat appeals at ultimately reducing binge drinking among female college students. Appeals focusing on sexual assault and rape proved to be the most effective. In conclusion, it was found that social marketing messages in Ireland need to be more shocking and informative if the levels of binge drinking are ultimately going to be reduced among this target group.
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Introduction
1.1 Introduction and Objectives of Study

Binge Drinking is today commonly blamed for a lot of the social problems which exist in Irish society. The Irish of today are richer, trendier and more self-confident than our predecessors, all as a result of our economic success since the early nineties (Long, 2005). As a result of this increase in disposable income, especially among the younger generations, binge drinking at weekends has become a real social dilemma of 21st century Ireland. The sight of street violence, teenagers getting violently sick and general drunken disorderly acts are all common today in our cities, towns and villages in every county in the country (Mongan et al., 2007).

The work incorporated in this thesis concerns social marketing and its application to the problem of binge drinking among female college students in Cork. The main aim of the thesis is to ascertain what social marketing messages should contain in order to reduce the amount of binge drinking among female students in third level colleges in Cork. These females assessed various anti-alcohol or harm reduction messages and reactions were gauged. As most college students consider alcohol consumption normative behaviour, the issue of a harm-reduction approach rather than total abstinence was also investigated.

The thesis sets as its objectives to assess:

1. What is the extent of binge drinking among the female college student population?
2. What are their motivations/beliefs/expectancies about binge drinking?
3. What are their coping strategies in relation to binge drinking?
4. Are social threat appeals more powerful than physical threat appeals in reducing binge drinking among female college students?

Focus groups were conducted to ascertain these objectives. Participants in the focus groups were asked a series of general questions about their alcohol consumption and were then asked for their views and reactions to a number of different Public Service
Announcements (PSA). The PSAs shown were Irish, British, American and Australian. Interviews were also conducted with leading public health experts - Professor Joseph Barry (Trinity College Dublin) and Professor Patrick Wall (University College Dublin) on their opinions on Ireland’s drinking culture and ways to reduce the level of harm caused.

1.2 Alcohol Consumption - An Irish Perspective

Alcohol has always been widely used and enjoyed in Irish society to celebrate special occasions such as christenings, weddings, sporting successes and is often part of the ritual of wakes and funerals (Long, 2005). Figure 1 shows that Ireland has one of the highest levels of alcohol consumption in the European Union (EU). People in Ireland consumed 10.6 litres of pure alcohol per person in 2003. The EU average consumption was 9.1 litres and ranged from 5.0 litres in Bulgaria to 14.6 litres in Luxembourg (World Health Organisation, 2003).

![Figure 1 - Alcohol consumption per capita in the European Union, 2003.](image)

Alcohol consumption among Irish people has increased by 17% over the past 11 years, from 11.4 litres per adult in 1995 to 13.4 litres in 2006. This rise in consumption has led to increases in alcohol-related harm and disease, and has resulted in more than 1,775 deaths according to the Health Research Board (HRB) (Mongan et al., 2007).

Culture plays an important role in determining drinking patterns and attitudes. In Mediterranean countries, the drinking culture generally does not condone either binge drinking or drunkenness, whereas in other northern European countries, including Ireland, binge drinking is more readily tolerated and accepted with drunkenness a common outcome of drinking occasions (Long, 2005). Ireland, culturally, can be considered to have a “wet environment” – a community in which drinking is prevalent or common; opinion is generally tolerant or positive; and alcohol is readily available both commercially and at private social occasions, as well as being advertised (National Academy of Sciences, 2003). Long (2005), cites Owen Keenan, chief executive of Central Copy Clearance Ireland (a pre-production vetting service for alcohol advertising) and his views on our drinking culture.

In Ireland, everybody knows our Prime Minister’s favourite tipple in the way the British might know Tony Blair’s favourite airline. It is interesting also how many of our world famous brands, such as Guinness, Baileys, Jameson, are alcoholic drinks. Our whole national identity is wrapped up in drink. P. 14

Long (2005) cites recent research regarding alcohol consumption in Ireland which reveals some of the social effects alcohol has on the country:

- Young Irish men spend four times more on alcohol than fellow Europeans.
- More than half of Irish people say they drink regularly, which is double the EU average.
- In Ireland, 154.7 litres of beer are sold each year for every man, woman and child. This is more than double the EU average.
- Irish people, under 30 years of age spend an average of 9% of their income on alcohol, compared to the next highest spenders, Sweden who spend 1.9%.
The HRB report by Mongan et al., (2007) states that beer is the most widely consumed alcoholic beverage in Ireland and accounted for 51% of all alcohol consumed in 2006. Although the market share of beer dropped from 67% in 1995 to 51% in 2006, Ireland has one of the highest levels of beer consumption per adult in the EU. Other noticeable trends in the type of drink consumed include the rise in popularity of wine, with an increase in consumption of 170% between 1995 and 2006. The consumption of spirits increased steadily between 1995 and 2002 (+49%) but decreased (-21%) in 2003 due to an increase in excise duty. A similar trend was noticed for cider consumption in this period also, with consumption increasing between 1995 and 2001. An increase in excise in December 2001, resulted in a 13% reduction in cider consumption in 2002. This is interesting as it shows how excise duty can be used to lower consumption of alcohol in a relatively short time-frame. Figure 2 details these trends in relation to litres of pure alcohol consumed, showing that the total litres of pure alcohol rose from 11.38 in 1995 to 13.36 in 2006. This was down on the 2001 peak year of 14.09 litres of pure alcohol.

In general, increases in overall consumption are accompanied by a greater incidence of health and social problems (Mongan et al., 2007). In addition to the high volume of alcohol consumed by people in Ireland, drinking occasions appear to be strongly related to heavy episodic or “binge” drinking patterns. Binge drinking is defined as drinking five...
or more drinks in a row for men and four or more drinks in a row for women, at least once in the previous two weeks. Binge drinking is associated with adverse health and social consequences, including accidents, suicide, violence and loss of productivity or absenteeism, which affect both the individuals who engage in it and those around them (Mongan et al., 2007).

According to the National Drinking Survey conducted in 2002, (Mongan et al., 2007) the drinking population in Ireland had the lowest percentage of daily drinkers but the highest percentage of weekly binge drinkers in the EU, with 48% of men and 16% of women reporting binge drinking at least once weekly. Among men in Ireland, 58 of every 100 drinking events ended up in binge drinking; the corresponding figure for women in Ireland was 30 of every 100 events. Both men and women in Ireland showed higher rates than other European Comparative Alcohol Study countries with respect to 'regretting things said or done after drinking', 'getting into a fight', 'being in an accident', 'adversely affecting work or studies' and 'affecting relationships' (Ramstedt and Hope, 2005).

Between 1990 and 2002, there was an estimated increase in alcohol consumption in Ireland of 41% - the highest rate of increase in Europe -- and an accompanying increase in alcohol related harm (Fitzgerald, 2004). In 2002, more than 43,000 Irish people were prosecuted for being drunk and abusive in public -- an increase of 10,000 from 1995. Alcohol abuse is reported to be the reason for filling 20% of all hospital beds, 25% of male admissions and 15% of female admissions to psychiatric hospitals, and 25% of admissions to casualty departments, the latter rising to 50% at weekends (Mongan et al., 2007). For young people aged 15-29, alcohol contributes to over 33% of poisonings, drownings, homicide and falls. Overall, almost half of all crime in Ireland is alcohol-related and contrary to popular belief, it is moderate drinkers on occasional binges, rather than heavy drinkers, who account for most of the offences (Long, 2005).

For young people in Ireland, alcohol is the drug of choice and the initiation of alcohol consumption typically occurs during adolescence. The College Lifestyle an Attitudinal
National survey conducted in Ireland in 2005, which studied college students with an average age of 21 years, found that the average age at onset of drinking was 15 years (Hope et al., 2005). The high rate of alcohol use among young people has been attributed to a number of factors, including increased affluence, loss of parental control and increased availability of and access to alcohol. Heavy drinking in adolescence is related to problem alcohol use in adulthood. People who begin drinking before the age of 15 are four times more likely to develop alcohol dependence at some time in their lives than those who have their first drink at age 20 or older (Grant et al., 1997).

Drinking to intoxication appears to be a key feature of the drinking habits of young people in Ireland. This has been confirmed in consecutive European School Survey Project on Alcohol and other Drugs reports (Hibert et al. 2000; 2004) which compared alcohol and drug use among 15-16-year-old students in 35 European countries. The 2004 report found that 32% of students in Ireland reported drinking five or more drinks in a row three times or more in the previous 30 days, which was the highest proportion recorded in any country. It also reported that beer drinking was a predominantly male behaviour, while spirits and alcopops were the beverages of choice among females.

A survey by the Drinks Industry Group of Ireland discovered that Ireland has little understanding of what the phenomenon of binge drinking actually involves. It revealed that 27% think binge drinking is the consumption of five times more alcohol than the official definition allows. Half the people who responded to the survey believed binge drinking related to occasions when between five and nine pints were consumed. The drinks group said more efforts were needed to educate people on what the terms mean and what is acceptable drinking (Long, 2005).

A recent international study of drinking among university students in 21 countries found that Ireland has the highest proportion of both male and female heavy and binge drinkers (Dantzer et al., 2006). In the study, 49% of Irish third level males and 57% of Irish third level females were classified as heavy drinkers. As can be seen from Figure 3, Ireland and England are countries where the prevalence of heavy drinking among female college
students far outweighs that of their male counterparts by a considerable percentage, almost 10% in both cases. In the majority of the other countries, it is males who consume more alcohol than their female counterparts. Heavy drinking was associated with affluence and was more common among students who lived away from home, had wealthier family backgrounds and who had educated parents. Beliefs about the dangers to health of excessive consumption were negatively related to heavy drinking. These findings were consistent with the CLAN survey in 2005 which reported binge drinking at least once a week in 61% of male and 44% of female students in Ireland. Regular binge drinkers, defined as those who engaged in binge drinking at least once weekly, were two to three times more likely to experience adverse consequences because of their drinking than students who were binge drinking less frequently, or were non-binge-drinkers (CLAN, 2005).

**Figure 3** – Heavy drinking among University Students in Europe (>5 drinks in past 30 days)

Source - Dantzer et al., (2006)

In 2002, the then Minister for Health and Children, Mr. Micheál Martin, established the *Strategic Task Force on Alcohol*, whose brief was to recommend specific evidence-based
measures to prevent and reduce alcohol-related harm in Ireland. This task force published reports in 2002 and 2004, at a time when it was reported that Irish people were the second-highest consumers of alcohol in the EU and that alcohol consumption had increased by 41% in the preceding decade (Long, 2005). These reports provided a comprehensive review of the problems associated with alcohol use in Ireland and presented evidence-based strategies for the reduction of alcohol-related harm. The task force favoured policy measures that influenced and changed the physical, social and cultural environment around alcohol, rather than measures targeted solely at the individual drinker (Long, 2005).

The Commission on Liquor Licensing’s (2003) final report recommends that certain problem areas within the advertising and marketing, education, parent and underage sectors be properly addressed before Ireland’s drinking culture with high consumption rates can begin to be rectified. In 2006, the EU published the report Alcohol in Europe – A Public Health Perspective (Anderson and Baumberg, 2006) which brought together all existing evidence to demonstrate which policy options work and which do not. Policy measures identified that may prove effective include: unrestricted breath testing, lowered blood alcohol concentration levels for drivers, licence regulation, taxation and briefing advice to heavy drinkers. They concluded that measures such as designated driver campaigns and advertising self-regulation generally do not work. Harman (2008) states that the measures relating to drink driving are having an impact in Ireland as random breath testing has been introduced and this has resulted in a reduction in road deaths in 2007 from previous years.

This section has dealt with alcohol consumption patterns in Ireland, with particular emphasis on the increase in consumption between 1990 and 2002 and also demonstrates that alcohol is the drug of choice for young people in Ireland. It has also highlighted that university students in Ireland are amongst the heaviest drinkers in Europe. The next section will now detail alcohol consumption amongst our European counterparts.
1.3 Alcohol Consumption - A European Perspective

The European Union (EU) is the heaviest drinking region of the world, drinking 11 litres of pure alcohol per adult each year (Anderson and Baumberg, 2006). Europe has been confronted with an increasing prevalence of binge drinking, particularly among adolescents and young adults. The European Comparative Alcohol Survey (ECAS) of 2002 (Hemstrom et al, 2002) showed that for Finland, France, Germany, Sweden, Italy and the UK, the highest frequency of binge drinking was in the youngest age group (18-29 years). Traditionally in Europe, there has been a long lasting view of a north-south divide of drinking and binge drinking (Ahlstrom-Laakso, 1976), with a higher integration of drinking in everyday life (e.g. drinking with meals) in southern Europe, and stronger traditions of drunkenness in northern Europe. In the ECAS of 2002 this trend also became evident. Table 1 details that higher volume per drinking occasion and higher proportions of binge drinking occasions to all drinking occasions were found in the UK, Sweden and Finland compared with Italy, France and Germany for both men and women, but especially for men (Hemstrom et al, 2002).

Amongst men and women generally, the volume of beer and spirits drunk per drinking occasion decreases with age across all countries, with wine consumption tending to be more consistent across the age groups. Wine consumption is particularly interesting with regard to men as it increases in the 30-49 age group amongst all the countries. The north-south divide can be clearly illustrated in Table 1. For example, in the male 18-29 age group in the UK, 8.9 beers per drinking occasion are consumed compared to 2 beers per drinking occasion in Italy. The same trend can be seen for spirits, 4 drinks in the UK and 1.9 drinks in Italy. The same trend can be noticed for women in the 18-29 age group. In Finland, 4.5 beers per drinking occasion are consumed compared to 1.2 in France for women, with spirits consumption averaging 2.7 drinks in Finland and 1.1 in France and Italy for the 18-29 female age-group.

Some 80 million Europeans aged 15 years and over (over one fifth of the adult EU population) reported binge drinking at least once a week in 2006. Some 25 million
Europeans aged 15 years and over (1 in 15 of the adult population) reported that binge drinking was their usual pattern of consumption during the previous month. Around 24% of those aged 15-24 years reported binge drinking at least once a week in 2006, while it was also common among those aged over 55 years, with 18% binging at least once a week (Institute of Alcohol Studies, 2007).

Table 1.

Volume (Number of Drinks) per drinking occasion

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<td>18-29</td>
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<td>30-49</td>
<td>2.4</td>
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<td>50-64</td>
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<td>Total</td>
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Source: The European Comparative Alcohol Survey (2002).
Nearly all (90%) of 15-16 year old EU students have drunk alcohol at some point in their lives (Currie et al., 2000). Figure 4 shows that the highest levels of both binge-drinking and drunkenness are found in Bulgaria, Poland, Denmark and the Netherlands, followed by Ireland, the Czech Republic, Belgium and Austria. This contrasts with the low levels found in France, Portugal, Turkey, Slovakia, Hungary and the other Nordic countries. Binge drinking three or more times in the last month, was reported by 31% of boys and 33% of girls in Ireland, but only 12%-13% of boys and 5%-7% of girls in France and Hungary respectively. Across the entire EU, 12.5% of 15-16 year olds have been drunk more than 20 times in their lives, and over 17% have binged three times or more in the last month (Institute of Alcohol Studies, 2007).

Over a twenty year period, alcohol consumption in the UK has risen by 31% (Commission for Distilled Spirits, 2004), creating a market worth about £25 billion a year (Department for Culture, Media and Sport, 2001). Alcohol is a deep-seated part of everyday life in the UK – around 78,000 public houses, 25,000 restaurants, 4,000 nightclubs, 23,000 other clubs and 45,000 other premises, shops and supermarkets are
licensed to sell alcohol (Mistral et al., 2006). Gill (2002) reviewing 25 years of research in alcohol consumption and binge drinking among UK undergraduate students, found that a significant number of male and female students drink more than the recommended weekly upper limit (14 units for women and 21 units for men). Additionally, she concluded that the level of binge drinking in undergraduates may exceed the level observed in the general population and the level observed in US university students. Data from the general population in the UK showed that young people aged between 16-24, are more likely to exceed the recommended upper alcohol limit and be drunk compared with older adults. Additionally, hazardous drinking also increased over the decade 1992-2002 among young people (Advisory Council on the Misuse of Drugs, 2006). Evidence from the student and general population suggest that drinking behaviour in females has changed over time. It appears that alcohol consumption has increased among female students and it resembles alcohol consumption in male students (Gill, 2002). The proportion of women in the UK, aged between 16-24 years of age, drinking more than three drinks per day increased from 9% in 1992 to 18% in 2002 (Noble, 2002).

This section has detailed alcohol consumption across the EU. It has paid particular attention to the North-South divide that appears to exist in relation to the amount of alcohol consumed and the propensity to binge drink regularly in northern countries as opposed to southern countries. The next section will now take a look at alcohol consumption in the US.

1.4 Alcohol Consumption - A US Perspective

Inappropriate alcohol use among college students is a major public health concern (US Department of Education, 2004). The abuse of alcohol remains one of the leading public health problems for US colleges and universities. Several national studies have found that approximately two out of five college students are binge drinkers (Centres for Disease Control and Prevention, 1997; Johnston et al., 1999). Alcohol and other drug abuse pose a serious threat to the intellectual, psychological and physical development of traditional-age undergraduate college students. A Student Life Survey, conducted by Boyd and
McCabe (2005) in the University of Michigan, concluded that consistent with national research, alcohol was the most often used drug among undergraduate students. In 2005, 53% of undergraduate students reported binge drinking, which was defined as having five or more drinks in a row for men and four or more drinks for women in the past two weeks. There were several primary and secondary consequences associated with alcohol use. For instance, 22% of undergraduate students who consumed alcohol in the past year reported driving a car under the influence of alcohol and 29% experienced a blackout. Several factors have been associated with heavy drinking in US college studies. Higher rates have been described in white compared with black students; individuals whose parents drink alcohol; sports fans; students who live away from their families' homes; and students who do not attend church (Vik et al., 2005; Nelson and Wechsler, 2003; Weltzman et al., 2003a; 2003b).

More than 10 million youths, aged 12 to 20, report drinking alcohol in the past month in the USA (National Academy of Sciences, 2003). Brannock et al., (1990) revealed that 25% of college students could be considered problem drinkers, concluding that the heaviest consumption of alcohol in American society is by people between the ages of 17 and 24. A study conducted by Delucchi et al., (2007) examined the level, changes and predictors of alcohol consumption and binge drinking over a seven year period among young adults (18-25 years) in California. As they aged, the sample group of young adults demonstrated an overall decline in alcohol consumption. While the overall averages for both volume and binge drinking declined, they appeared to level off at an average age of about 24 years, which is about the end of the emergent adulthood period. The most unexpected finding was the unpredicted greater level of binge drinking among women. This suggests that if one were to find two heavy drinking samples of young adults who were identical on everything except their sex, the women would tend to binge more over time than men. Other studies from college campuses have documented increased binge drinking among young women, as a badge of honour to be able to drink like a guy as well as to receive positive attention from male peers (Young et al., 2005).
One of the largest studies of US college drinking behaviour conducted by Wechsler et al., (1994), based on a random sample of 17,592 students, found that almost half (44%) were binge drinkers and 19% binged as frequently as three times or more within a two-week period. Fraternities¹ and sororities² are centres of alcohol abuse on campuses. Four out of five students who live in fraternities or sororities are binge drinkers. Binge drinking behaviour has been described as the most significant health hazard on US college campuses (Wechsler et al, 1994). Figure 5 details the study conducted by Wechsler et al., (1994).

![Fraternity compared to non-fraternity members' binge drinking trends](source: Wechsler et al. (1994))

**Figure 5** – Fraternity compared to non-fraternity members’ binge drinking trends

Source - Wechsler et al. (1994).

With regard to any type of alcohol consumption, it is estimated that 1,400 college students in the US die each year from alcohol-related injuries (Hingson et al., 2002). Each year, US college students spend approximately $5.5 billion on alcohol – more than they spend on soft drinks, milk, juice, tea, coffee and books combined (US Drug Strategies, 1999).

¹ A social organization for male students, with specific objectives, rules and regulations
² This is an all-female social organisation organised around a shared set of values and ideals
As can be seen from this section, alcohol consumption in US colleges is very prevalent and the heaviest consumption of alcohol in the US is by people between the ages of 17 and 24. The next section will briefly examine alcohol consumption in Australia and also mention countries who are beginning to conduct research on their alcohol consumption patterns.

1.5 Alcohol Consumption - Rest of World Perspective

In Australia, a national survey revealed that 80% of Australian adolescents over the age of 14 report drinking alcohol and that 66% of these drinking adolescents are consuming “high risk” amounts of alcohol (McBride et al., 2000). Research commissioned by the Alcohol Education Rehabilitation Foundation (2007), reported that at least one-third of 18-24 year old male and female Australians consider themselves to be binge drinkers. It also reveals that more young women (37%) than young men (30%) consider themselves to be binge drinkers. The research also reports that there is a lack of awareness around what constitutes excessive drinking, with 33% of 18-24 year olds, who drink more than 10 drinks on a typical occasion not classifying themselves as binge drinkers. The Australian Institute of Health and Welfare (2001), reported that among young people aged 18-24 years, 57% of males and 42% of females were regular drinkers. Nearly 19% drank at risky or high-risk levels in the long term with 17% being male and 20% being female.

A study conducted by Johnston and White (2004) surveyed female university students in Australia and found that 48% of their sample drank dangerously. Davey et al., (2002) reported 59% of their sample population to be drinking dangerously and found no difference between male and female drinking rates, which indicates that female university students are drinking at dangerous levels in relation to their body weight. Roche and Watt (1999) found that 43% of female respondents aged between 17-19 years of age and 53% of those aged between 20-22 years of age, usually consumed more than five drinks when they drank alcohol. On average, 44% of female students in their sample were at risk of alcohol related harm.
There has been extensive research conducted on alcohol consumption in the EU, the US and Australia. Prior to an international study on alcohol conducted by Dantzer et al. (2006), very little was known about alcohol use among students in developing countries or in countries outside the European Union, North America and Australia. Not only is heavy drinking common among students in countries that have been extensively studied in the past such as the US and the UK (Wechsler et al., 2000a; Gill, 2002), but also in several Central and Eastern European countries, such as Poland and Slovakia, and in developing countries like Columbia and Venezuela (Dantzer et al., 2006).

In this chapter we have identified alcohol consumption patterns in Ireland, the EU, the US and Australia. It highlights that there has been extensive research conducted in these selected countries and that there are major concerns expressed with regard to the levels of alcohol being consumed and also to the drinking patterns of young people in particular.

1.6 Layout of Thesis

Chapter 1 introduces the objectives of the study and gives a description of alcohol use at present in Ireland, the UK, the US, Australia and other countries around the world. These countries were chosen for comparative purposes and also due to the large amount of research conducted on the topic of binge drinking in these countries in recent years. The chapter highlights the extent of drinking in these selected countries and also enables the reader to compare the levels of alcohol consumption among these countries.

Chapter 2 details the health issues relating to alcohol consumption from the female perspective. The chapter highlights some of the health consequences associated with consuming large amounts of alcohol including issues such as cancer, osteoporosis, sexual assault, sexually transmitted infections, suicide and foetal alcohol syndrome. The chapter then proceeds to investigate the causes and reasons behind binge drinking. The chapter establishes the motives behind female binge drinking and explores the different factors involved in the decision to start binge drinking. These factors include family and
advertising influences, impact of peers, rite of passage to adulthood, college factors and the role of alcohol price and availability.

Chapter 3 discusses social marketing in detail and how it can be used to influence behaviour change. It analyses the role of PSAs in terms of the use of fear appeals, with the use of both physical and social threats, to try and influence this change. The chapter also analyses the initiation of a harm reduction approach as opposed to a total abstinence approach in terms of trying to reduce binge drinking amongst college females.

Chapter 4 provides details of the methodology used in this research. Data collection methods used for the purposes of this study included the use of focus groups with female students and short interviews with leading public health experts. These methods are discussed in detail in the chapter.

Chapter 5 details the results and findings of the focus groups and interviews in relation to each objective of the thesis.

Chapter 6 contains the main recommendations and conclusions of the research.
Chapter 2

Alcohol Related Health Issues and Binge Drinking Motives
2.1 Introduction to Alcohol Related Problems

A public health approach to alcohol policy has emerged over the last three decades because of the weight of evidence-based scientific research. This approach, endorsed by the World Health Organisation (WHO), recognises that alcohol contributes to a range of health, social and behavioural problems – in terms of its toxicity, its potential to create dependency and its negative impact on human behaviour (Mongan et al., 2007). The WHO (2004) estimated that 9.2% of the worldwide disease burden is attributable to alcohol use.

Alcohol is a toxic substance that can harm almost any system or organ of the body, and is related to more than 60 different disorders with short and long term consequences. For many conditions, there is an increasing risk with increasing levels of alcohol consumption, with no evidence of a threshold level below which alcohol can be regarded as entirely risk free. Alcohol use and a pattern of binge drinking are associated with an increased risk to the individual of negative social consequences, reduced work performance, injuries, drink driving accidents, brain damage, alcohol dependence, suicide, stroke, irregular heart rhythms, coronary heart disease, sexually transmitted diseases and premature death. Alcohol use and a pattern of binge drinking are associated with an increased risk to people other than the drinker (third party harm) including negative social consequences, injuries at work, violence and crime, interpersonal violence, accidents from others’ drink driving, sexually transmitted diseases, and to the unborn child - a range of neuron-behavioural deficits running through to adolescence and with lifelong consequences (Institute of Alcohol Studies, 2007).

2.1.1 Women and Alcohol Related Health Issues

Women metabolise alcohol differently from men and have higher blood alcohol concentrations for a given volume of alcohol consumed. Therefore, the risks associated with alcohol are amplified for women. With regard to overall health effects, it is important to note that women are at increased risk from alcohol use because they need
less alcohol per kilogram of body weight than men to attain the same peak blood alcohol level and level of impairment. The cumulative effects of alcohol abuse generally result in more medical problems for women than for men e.g. liver disease, stroke, breast cancer and osteoporosis (Rohsenow, 1998).

A recent report published by Mongan et al., (2007), states that it has become more socially acceptable for women to consume alcohol in greater volumes and in patterns mirroring that of their male counterparts. If these trends continue, there may be serious consequences for women’s health as women are at higher risk of developing physical complications than men, and these complications manifest themselves earlier in their drinking careers. The consequences of this change in drinking patterns can be observed in hospital discharges. According to Mongan et al., (2007), women account for just 25% of all alcohol-related discharges, but among those aged 17 or under, the proportion of female discharges is much higher at 47%. As women develop alcohol-related health complications earlier in their drinking career than men, it is likely that, if current trends continue, there will be significantly higher numbers of middle-aged women experiencing alcohol-related morbidity or at greater risk of premature mortality (Mongan et al., 2007).

In the following sections, this study will investigate in more detail issues affecting women. These include sexual assault and unsafe sexual practices; reproductive issues caused by alcohol consumption and alcohol and pregnancy concerns. This section then concludes with a more general overview of other harms caused by alcohol consumption.

2.1.2 Sexual Assault and Unsafe Sexual Practices

Alcohol use, and binge drinking in particular, is associated with risky behaviours, with women being especially vulnerable. In 2005, the Sexual Assault Treatment Unit in the Rotunda Hospital in Dublin reported 293 attendances, of which 277 were female. More than four units of alcohol had been consumed by the victim in 60% of cases. In 31% of cases, the possibility of a sexual crime needed investigation because of the patient’s memory loss, mostly after ingestion of large amounts of alcohol (Mongan et al., 2007).
Unsafe sexual practices increase the risk of crisis pregnancy and sexually transmitted infections. In a national study of young adults (18-45 age group) on Irish contraception and crisis pregnancy, almost half of men (45%) and 25% of women agreed that drinking alcohol had contributed to them having sex without using contraception (Rudle et al., 2004). Significantly, more 18-25 year olds (33%) in comparison to 26-35 year olds (17%) said that drinking alcohol was a reason for non-use of contraception. A national study of college students, reported that impaired judgement due to alcohol was cited as a reason for non-use of condoms for males (11%) and females (9%) who were sexually active (Hope et al., 2005). Students who were regular binge drinkers were two to three times more likely to engage in unintended sex and in unprotected sex than other drinkers. Almost 50% of female students who engaged in regular heavy drinking had sought emergency contraception in comparison to just over 33% of light drinkers. A study exploring alcohol use among a sample of women requesting emergency contraception in a Well Women Centre, reported a higher proportion (42%) of women who had used alcohol and did not use contraception in comparison to women (28%) who had not used alcohol or contraception on this occasion (Loxley et al., 2005).

Another potential negative consequence of unprotected sex is the risk of sexually transmitted infections (STIs). While there are several factors that contribute to STIs, alcohol is one factor that can lower inhibitions, impair judgement and result in the non-use of condoms, thus increasing the risk of STIs (Health Promotion Surveillance Centre, 2006). During 2005, three infectious diseases accounted for the vast majority (88%) of all notifiable STIs in Ireland. These were genital warts (34%); chlamydia trachomatis (33%) and non-specific urethritis (21%). Young adults aged 20-29 years accounted for almost 64% of all STI notifications in 2005 (Health Promotion Surveillance Centre, 2006).

2.1.3 Reproductive Issues caused by Alcohol Consumption

Mild-to-moderate alcohol use affects female reproductive function at several stages of life. It has been shown to have a detrimental effect on puberty, to disrupt the normal
menstrual cycle and reproductive function, and to alter hormonal levels in postmenopausal women. Alcohol markedly disrupts the normal menstrual cycle in females. Alcoholic women are known to have a variety of menstrual and reproductive disorders, from irregular menstrual cycles to complete cessation of menses, absence of ovulation (i.e., anovulation) and infertility (Mello et al., 1993). In females, alcohol ingestion, even in amounts insufficient to cause major damage to the liver or other organs, may lead to menstrual irregularities (Ryback, 1997). It is important to stress that alcohol ingestion at the wrong time, even in amounts insufficient to cause permanent tissue damage, can disrupt the delicate balance critical to maintaining female reproductive hormonal cycles and result in infertility. A study of healthy non-alcoholic women found that a substantial portion of women who drank small amounts of alcohol (i.e. social drinkers) stopped cycling normally and became at least temporarily infertile. This anovulation was associated with a reduced or absent Pituitary Lutenising Hormone secretion. All the affected women had reported normal menstrual cycles before the study (Mendelson and Mello, 1988). This finding is consistent with epidemiologic data from a representative national sample of 917 women, which showed increased rates of menstrual disturbances and infertility associated with increasing self-reported alcohol consumption (Wilsnack et al., 1984).

2.1.4 Alcohol and Pregnancy Concerns

A study of 120,000 pregnant women attending the Coombe Women’s Hospital in Dublin between 1987 and 2006 found that 60% of the women consumed alcohol during their pregnancy and 7.1% reported drinking more than six units per week (Barry et al., 2006). From a health promotion viewpoint, this highlights the importance of raising awareness and educating women about the risks of drinking alcohol during pregnancy. Prior to 2007, there were no official guidelines in Ireland regarding alcohol use during pregnancy. In September 2007 however, the Chief Medical Officer in the Department of Health and Children provided unambiguous advice in relation to alcohol consumption and pregnancy, stating;
Given the harmful drinking patterns in Ireland and the propensity to binge drink, there is a substantial risk of neurological damage to the foetus, resulting in Foetal Alcohol Spectrum Disorders (FASD). Alcohol offers no benefits to pregnancy outcomes. Therefore, it is in the child's best interest for a pregnant woman not to drink alcohol during pregnancy.

(Department of Health and Children, 2007).

Binge drinking appears to be a common drinking behaviour, and those who binge drink have an increased risk of impaired foetal growth and offspring behaviour. Beer consumption by lactating women might temporarily impair motor function of nursing infants (Mongan et al., 2007). Alcohol is a teratogen\(^3\) that has raised concerns about birth outcomes for years (Lemoine et al., 1968; Abel, 1998; Armstrong, 2003). Foetal Alcohol Syndrome (FAS) is a pattern of anomalies and developmental deficits found in children exposed to large amounts of alcohol in the prenatal period (May et al., 2007). Children with FAS have a characteristic pattern of facial and body deformity, delayed physical growth and development, and specific mental and behavioural deficits (Stratton et al., 1996). Figure 6 details these facial deformities.

![Figure 6 - Foetal Alcohol Syndrome Symptoms.](image)


Prenatal exposure to alcohol can be associated with a distinctive pattern of intellectual deficits that become apparent later in childhood, including reductions in general intellectual functioning and academic skills as well as deficits in verbal learning, spatial

\(^3\) Teratogen is any agent that interferes with normal embryonic development: alcohol, x-rays or rubella are examples
memory and reasoning, reaction time, balance and other cognitive and motor skills (Chen et al., 2003; Kodituwakko et al., 2003; Mattson et al., 2001). Some deficits, like problems with social functioning, appear to worsen as these individuals reach adolescence and adulthood, possibly leading to an increased rate of mental health disorders (Jacobson and Jacobson, 2002). A study by Kesmodel et al., (2002) found an increasing risk of stillbirth with increasing moderate alcohol intake. Women who consumed more than 5 drinks per week, had a 2-3 times increased risk of experiencing a stillbirth, mainly because of fetoplacental dysfunction. Intake of one or more alcoholic drinks per day during pregnancy has consistently been shown to be associated with reduced birth weight and intrauterine growth restriction (Lundsberg et al., 1997; Passaro et al., 1996).

2.1.5 General Alcohol Related Harms

There is a strong correlation between the risk of liver cirrhosis and the volume of alcohol consumed daily, with approximately 20% of alcohol-dependent people developing liver cirrhosis (Seitz and Homan, 2001). Liver cirrhosis mortality rates have increased sharply in both Britain and Ireland since the 1950s, but have decreased in the wine-drinking countries (Leon and McCambridge, 2006). These increases, which have occurred in conjunction with increased alcohol consumption, are especially evident since 1990 and have been observed in both men and women (Seitz and Homan, 2001). Epidemiological data have identified chronic alcohol consumption as a significant risk factor for cancer in the upper aerodigestive tract, including cancer of the oropharynx, larynx and oesophagus and also in the liver. Furthermore, alcohol increases the risk of developing cancer of the colorectum and the breast, especially in individuals with increased susceptibility to developing cancer (Poschi and Seitz, 2004). Pooled analysis has shown that consumption of 10g of pure alcohol per day increases the risk of breast cancer by 9% and consumption of 30-60g per day is associated with an increased risk of 41% (Smith-Warner et al., 1998).
In 2007, the International Agency for Research on Cancer (IARC) reassessed the carcinogenicity of alcoholic beverages and concluded that alcohol beverages are "carcinogenic to humans" and that the occurrence of malignant tumours of the oral cavity, pharynx, larynx, oesophagus, liver, colorectum and female breast is causally related to alcohol consumption (Baan et al., 2007). In Ireland, trends in age-standardised incidence rates for cancers between 1994 and 2003, showed that cancer of the liver had the highest increase in cancer rates with a 10.7% increase for females and 7.4% for males, in comparison to all cancers which increased by 1.1% for females and 1.2% for males (National Cancer Registry, 2006). The projected number of new alcohol related cancers from 2005-2020 is estimated to more than double for females (from 2,935 to 6,445) (National Cancer Registry, 2006).

A systematic review exploring the relationship between alcohol and stroke reported a causal association between heavy drinking and both hemorrhagic and ischemic stroke (Mazzaglia et al., 2001). A positive association was also found between binge drinking and stroke, demonstrating an increased risk for stroke related to an increased frequency of binge drinking. Volume of consumption as well as patterns of drinking, especially irregular heavy drinking, determine the burden of disease caused by alcohol (Mongan et al., 2007). A study by Rehm et al., (2001), showed that mortality in male drinkers consuming less than two drinks per day was about twice as high if they had occasional heavy drinking episodes.

In addition, alcohol use can have implications for bone health (Emanuele et al., 2003). A study by Block et al., (1993) found that oestrogen levels were depressed among adolescent girls aged 12-18 years of age for as long as two weeks after drinking moderately. This finding suggests the possibility that alcohol alters the reproductive awakening and maturation that marks puberty. Also, oestrogen's role in bone maturation raises the question of whether alcohol use during adolescence has long-term effects on bone health. Heavy alcohol use is a recognised risk factor for osteoporosis in humans (Singer, 1995). Human observational studies have not clearly indicated whether the osteoporosis seen in people who used alcohol was caused by alcohol itself or by attendant
nutritional deficiencies. Well-controlled experiments however, have demonstrated that alcohol itself can cause osteoporosis in growing and adult animals (Sampson et al., 1996, 1997; Hogan et al., 1997, 2001; Wezeman et al., 1999). Alcohol abuse contributes to bone weakness, increasing the risk of fracture (Orwoll and Klein, 1996). Alcohol consumption during adolescence is known to affect growth and body composition, perhaps by altering food intake patterns while alcohol is being consumed (Block et al., 1991).

Binge drinking, apart from the long-term effects, can increase impulsivity, reduce inhibition and distort behaviour, which may lead to accidents or suicide (Mongan et al., 2007). A study in the north-east of Ireland examined coroners' records for all deaths in 2001 and 2002 that were the result of an accident, suicide or injury and found that 55% tested positive for blood alcohol. Alcohol was detected in the blood samples of 40% of road traffic fatalities and in 55% of suicides (Bedford et al., 2006). According to the Irish Water Safety Association (2007), alcohol is a contributory factor in 30% of all drownings, while alcohol is considered a contributory factor in the deaths of 51% of people aged 20 or over who die in fires (National Safety Council of Ireland, 2003). Between 1995 and 2004, 1,775 alcohol-related deaths were recorded by the General Mortality Register with the incidence of alcohol-related mortality having increased from 3.8 to 7.1 per 100,000 adults, with a greater increase among men (4.6 to 9.9) than among women (3.0 to 4.3) in this period (Mongan et al., 2007). When the mortality incidence by type of condition is analysed, liver disease had been the leading cause of alcohol-related mortality in Ireland between 2001 and 2004 (Mongan et al., 2007).

This section has dealt with the related health issues associated with alcohol consumption, with particular emphasis placed on the health effects for women. We will now examine what binge drinking is and investigate the motives that result in students binge drinking.
2.2 What is Binge Drinking?

The term "binge drinking" is widely used to categorise a pattern of drinking in which five or more (four or more for women) drinks are consumed on a single occasion (Naimi et al, 2003). This term has been used most commonly to describe the drinking behaviours of college students, a population unique in developmental life stage, culture and environment (Arnett, 2000).

Despite its ubiquity, the 4+/5+ "binge" definition has been controversial for a number of reasons, and it has been suggested that use of this term may misrepresent the scope of the problem of heavy alcohol consumption on college campuses. Among the many criticisms of the "binge" drinking term is the fact that such a conceptualisation does not include for instance the drinker's weight or time period over which the alcohol was consumed (Dejong, 2003). The handful of studies that have been conducted to examine differences in actual intoxication (blood alcohol level) based on a 4+/5+ cut-off have suggested that this criterion is perhaps an inadequate way to identify risk drinking. Results indicate that a substantial percentage of so-called "binge" drinkers fail to reach blood alcohol levels generally indicative of intoxication (Beirmess et al., 2004; Lange and Voas, 2001; and Perkins et al., 2001). White et al., (2006) show a substantial portion of college students, drink at levels well beyond the standard "binge" threshold, supporting the idea that a clearer definition of heavy episodic drinking might be useful.

2.3 Female Student Binge Drinking

Binge drinking in young people, particularly female students, is a source of some concern to those engaged in health education. Studies of motivation for drinking in student samples have identified drinking for social reasons, drinking to cope, and drinking to enhance mood as the key determinants of alcohol consumption (Stewart et al, 1996; Sher et al, 1996). Research focusing on the reasons for drinking and binge drinking, point to the importance of culture in establishing norms and expectancies around alcohol consumption and particularly in influencing the drinking behaviour of young people. In a
review of research on student drinking, Baer (2002) concluded that alcohol is consumed "for several different purposes for different psychological effects in different contexts".

Despite the high rates of binge drinking and smoking among young women, and their increased vulnerability to the effects of alcohol and tobacco use compared with males, few studies have attempted to identify specific personal characteristics of girls and young women who may be at risk for engaging in these behaviours (Pirkle and Richter, 2006). The studies that have considered personality or behavioural correlates of substance use in young people suggest that some of these factors may play an important role in girls’ binge drinking and smoking. For example, Stein et al. (1996) found that girls who initiate smoking early in adolescence tend to be extroverted and have sociable personalities, whereas girls who continue to smoke in later adolescence and young adulthood tend to be depressed and have poor social relationships. Pirkle and Richter (2006) reported that adolescent girls who reported depressive symptoms at one time period were significantly likelier than less depressed girls to engage in binge drinking six months later.

In their exploration of the drinking behaviour of 15-24 year olds in Scotland, MacAskill et al., (2001) found that drinking for pleasure was the norm and that it was structured around other priorities such as studying, completing exams, etc. Binge drinking was also structured, the aim was controlled intoxication to reduce inhibition and have fun. A study conducted by Guise and Gill (2007), explores factors that are important for female students in Scotland. They asked participants to describe what they understand by the term binge drinking, why they drink and what kinds of things might trigger excessive consumption. Their analysis showed that binge drinking is defined not by reference to units of alcohol, but rather in terms of its behavioural outcome. They stressed the frivolous nature of going out and having a lot to drink. When describing triggers, the social nature of drinking was emphasised throughout. The study identifies that binge drinking lessens inhibitions and takes place within socially acceptable boundaries. This is similar to the findings of MacAskill et al., (2001).
Increases in drinking and related problems have been reported for first year college students across several studies (Hartzler and Fromme, 2003; Leeman and Wapner, 2001). Findings consistently indicate that the majority (80%-85%) of college women drink (Johnston et al., 2001) and a substantial percentage (39%) engage in heavy episodic drinking and among those women who do so, rates of alcohol-related problems are similar to those experienced by heavy-drinking college men (Wechsler et al., 2000a; Wechsler and Kuo, 2000b).

Parks et al., (2008), assessed women’s risk for victimisation during the first year of college, based on changes in drinking during the transition from high school to college. They compared continued abstainers with women who began drinking (“new” drinkers) and women who continued drinking but either decreased, increased, or did not change their level of weekly drinking. They concluded that abstainers were significantly less likely to experience physical or sexual victimisation during the first year of college, compared with drinkers. New drinkers and those who continued drinking were found to be exposed to a greater risk of victimisation as a result of their drinking patterns.

One personality characteristic that has received limited attention in predicting substance abuse, but that appears by its nature to have relevance, is self monitoring (Pirkle and Richter, 2006). Self-monitoring is the extent to which one has the ability and desire to engage in impression management by adjusting one’s behaviour to fit the requirements of a particular situation or to induce positive reactions in others (Snyder, 1974). High self-monitors pay great attention to the impressions they make on others and show considerable adaptability in their behaviour, whereas low self-monitors are less concerned about impressions and are more likely to display their true attitude and disposition across situations. Because they are highly concerned with how others perceive them, high self-monitors may engage in substance use to fit an image that is expected of them (Leary et al., 1994; Martin and Leary, 2001). Sharp and Getz (1996) found that in college students, self-monitoring tendencies discriminated alcohol initiators from non-initiators, with alcohol use serving an impression management function. In the study by Pirkle and Richter (2006), they found that girls who engage in binge drinking –
a typically social activity for girls and young women that is highly susceptible to peer pressure – were likelier to be high in self-monitoring. Bradizza et al., (1999) found that social motives for drinking consistent with self-monitoring (i.e. “it’s one way of being part of the group”) predicted alcohol misuse in older teens. These girls are also more likely to endorse the notion that people their age drink and have an excuse to engage in behaviour they would not normally engage in.

A behavioural risk factor for substance use that, although not unique to young females, certainly plays a larger role for girls and young women than for boys and young men is unhealthy dieting behaviours or eating disorders. For girls, there is a strong relationship among weight concerns, dieting, and smoking (Austin and Gortmaker, 2001; Tomeo et al., 1999). Data from the 1999 Youth Risk Behaviour Survey indicate that girls who perceive themselves as overweight, report wanting to lose weight, and report engaging in unhealthy dieting behaviours (e.g. fasting, taking diet pills, vomiting), drink more alcohol than girls with healthier weight-related attitudes and behaviours (Centre for Disease Control and Prevention, 1999). This is despite the high caloric content of alcohol. Although alcohol is high in calories, girls concerned about their weight may be “saving up” their calories for their alcohol binges (Pirkle and Richter, 2006). Earlier analysis conducted on data from the Centre on Addiction and Substance Abuse survey (2003) of girls and young women found that only 56% of them were aware that drinking alcohol contributes to weight gain; 5.7% even thought that drinking alcohol contributes to weight loss.

2.4 Binge Drinking Motives

Young people's consumption of alcohol is an ongoing problem (Cox et al., 2002; Cox and Blount, 1998; Carey, 1995). Many adolescents and young adults drink alcohol excessively in binges, with resulting serious negative consequences. Young people’s attitudes, beliefs and expectations with regard to substance use and its effects may be the most proximal risk factor for actual substance use behaviours (Centre on Addiction and Substance Abuse, 2003; Johnson and Johnson, 1997). Young people use alcohol not only
to get intoxicated, but also they believe that it will help them relax, feel more confident, and boost their mood (Boys et al., 2001). Liu and Kaplan (1996) found that young women are more likely than young men to binge drink to help them alleviate distress, whereas young men are more likely to report binge drinking for social and appearance purposes. It would therefore be worthwhile to identify the factors that motivate young people to drink problematically, and how these factors might place them at risk for alcohol problems later in life.

A number of different motivations have been identified as important predictors of binge drinking including coping, conforming, enhancement and drinking for social reasons (Cooper, 1994). These motives are related to some form of positive or negative reinforcement gained by using alcohol. Furthermore, research indicates that different drinking motives lead to unique patterns of drinking and consequences of use. Personal coping styles have been examined in relation to substance use. Cooper et al., (1988) found that university students with avoidant coping styles who thought of drinking as a coping mechanism were likely to use alcohol and experience alcohol related problems. Other research suggests that avoidance coping may be a stronger predictor of alcohol use in females than in males (Stewart et al., 2001; Thombs et al., 1993). Drinking to deal with depression or anxiety or using alcohol to regulate negative emotions, is an example of using alcohol to cope (Cooper et al., 1995). Students who drink alcohol for coping reasons tend to be frequent users. They often drink alone and are more likely to binge drink (Cooper, 1994; Cooper et al., 1995; Williams and Clark, 1998).

Drinking to conform to the expectations of the social group is a form of positive reinforcement. It is the fear of being rejected by peers and becoming socially isolated that motivates them to drink (Cooper, 1994). Enhancement is related to positive reinforcement and occurs when individuals use alcohol to enhance their positive mood or well-being. Students who drink in order to enhance a good time, report higher quantities of alcohol consumption than students who endorse coping or conforming motives, and are also more likely to report binge drinking (Cooper et al., 1995; Reid et al., 2003; Williams and Clark, 1998). Drinking for social reasons is also related to positive
reinforcement. Social drinkers are more comparable to enhancement drinkers than to copers or conformers and thus are likely to be heavy drinkers (Cooper, 1994).

Research indicates that children learn about consumption stereotypes from four major socialisation agents: peers, media, family and schools (Belk et al. 1982; Churchill and Moschis, 1979; John, 1999). Once consumption stereotypes are formed, they tend to remain relatively stable (Belk et al., 1982). These four major socialisation agents will be examined further.

2.4.1 Impact of Peers

The transition from adolescence to adulthood is accompanied by intensified contacts with peers and an entrance into new social contexts and activities (Long, 2005). Going to college can be a very exciting period but one where young people often encounter a number of challenges. Many students may experience, often for the first time in their lives, a wide range of demands on individual, interpersonal, academic and societal levels. These include leaving home, developing autonomy, making new friends and peer pressure which may put them at risk of substance misuse (Larimer et al., 2005). In addition, environmental, individual, personality and family factors such as drug-using peers, parental substance abuse and mental health problems continue to play a significant role as risk factors (Canning et al., 2004).

During college, peers serve as a major means of support and guidance for most college students (Borsari and Carey, 2001). Peers are perhaps the most important social reference group in the college environment (Perkins, 2002). This can influence alcohol use both directly (i.e. pressurising a person to drink; offering them a drink) and indirectly (i.e. perceived norms). Indirect influences include both descriptive (what people actually do; behaviour) and injunctive (what people feel is correct; attitudes). These social influences have been found to be among the strongest and most consistent predictors of heavy drinking in the college environment (Borsari and Carey, 2003).
Social norms are also an important factor influencing binge drinking among college students. At the heart of the social norms approach is the notion that group norms regulate and control behaviour. For example, college students who believe that binge drinking is a normative part of the college lifestyle, may find it acceptable to drink at increased quantities and frequencies in order to conform to the norms of the group (Arata et al., 2003; Borsari and Carey, 2001; Carter and Kahnweiler, 2000). Failure to conform to group norms, by not using alcohol, may result in rejection by peers and social isolation.

Peer influence is also especially significant for highly integrated groups; college students who report excessive exposure to peers, more close friends and more time spent socialising with peers have higher levels of drinking (Wechsler et al., 1995a). Furthermore, research shows that college students in “peer-intensive” environments are more likely to be influenced by group norms, as individuals feel greater pressure to conform to group expectations of behaviour (Perkins, 2002).

Students’ differing perceptions of peers’ alcohol consumption and cannabis use predicts and explains a significant amount of variance in alcohol and cannabis use (Perkins et al., 2005). Additionally, students believe others are more accepting of heavy drinking than they themselves are (Alva, 1998; Prentice and Miller, 1993) and overestimate the degree of approval of heavy drinking (Larimer et al., 1997). These misconceptions of behaviours and attitudes predict drinking behaviour and associated drinking-related problems (Clapp and McDonnell, 2000; Korcuska and Thombs, 2003).

Social impact theory (Latane, 1981), suggests that an individual’s feelings, attitudes and behaviour can be influenced by the presence of others. Closeness to the group, how important the group is to oneself and size of the group all combine to influence individuals. The closer one is in proximity to peers in the group, the more connected he/she feels to his/her group and the larger the size of the group all combine to impact social influence. Extensive research, (Arata et al., 2003; Carter and Kahnweiler, 2000), supports the idea that peers influence the drinking behaviours and attitudes of college
students. Pederson et al., (2007) found that the presence of peers during assessment may influence responses to questions posed about perceived and actual norms. Participants endorsed higher self-reports of individual alcohol behaviour when others in their ‘group’ were immediately surrounding them. These findings are important to consider as context may impact individual reports of actual drinking behaviour among college students. Additionally, as college students tend to overestimate the drinking behaviours and attitudes of their peers as previously discussed, the presence of members of an individual’s peer reference group may actually augment these overestimations.

2.4.2 Influence of Family

The second decade of life is a period of significant reorganisation and change in family relationships (Grotevant, 1987). Normative transformations include increased autonomy and independence from parents, ideally in a context of continued support and attachment (Silverberg and Gondoli, 1996). A long tradition of theoretical and empirical research has demonstrated the importance of the family and particularly parent-child relationships on the development of a whole range of adolescent behaviours, including alcohol abuse, illicit drug use and delinquency. Barnes (1990), traces early theoretical development back to the work of Parsons (1955), who believed that the socialisation of children was the basic and most important function of the family. The child internalises the cultural system of the family so that they can carry out the roles required of them in later life. Thus family socialisation provides the consensual basis for maintaining social order and promoting non-problem behaviour, including non-problem drinking.

Families initially shape the attitudes and behaviours of children. At approximately the same time as young people seek integration in the peer group, they are inclined to distance themselves from social control of parents and other authorities. Parents are role models to their children from infancy, throughout childhood and into adulthood, as the family is the primary source of socialisation. Parental behaviour and attitudes toward alcohol consumption (as with any social behaviour) is an influential factor that may determine adolescent drinking behaviour and indeed future adult drinking behaviour.
Alcohol use tends to increase as adolescents become more independent from their parents (Baer and Bray, 1999) and as parental monitoring tends to lessen (Barnes et al., 2000). During college, students continue to seek parental support and assistance in times of stress. Parent support predicts commitment to career development and persistence (Pascarella and Terenzini, 1991).

Family structure has often been noted as a factor in promoting problem drinking behaviour. Burnside et al., (1986), for instance, showed that adolescents in single parent and step-parent families reported more alcohol use than adolescents from intact families, when considering both frequency and quantity of alcohol use. However, the picture would appear to be more complex for other structural factors related to the social and economic circumstances of the family unit. The findings from two contemporary Scottish studies (Currie and Todd, 1993; Green et al., 1991) provide a relatively detailed profile of young people’s drinking behaviour across a range of indicators, including prevalence, frequency of use, amount consumed and episodes of drunkenness. Both studies report a clear pattern of social class differences in mid-adolescence, at around 15-16 years of age, with young people from non-intact households more likely to drink. But, once results for amounts of alcohol consumed and drunkenness are also considered, one study found few class-based differences in the mean number of units of alcohol drank in the previous week (Green et al., 1991), while the other study noted that episodes of drunkenness were more common among young people from non-professional home backgrounds, rather than among adolescents from middle class homes (Currie and Todd, 1993).

Parental support and control have received much attention from researchers, who have shown these two features of parental behaviour to have important consequences for health behaviours, including teenage drinking. Foxcroft and Lowe (1995), concluded that supportive behaviours are those which bolster the individual’s sense of belonging in the family. Supportive behaviours being those that are inclusive, warm and which generate high self-esteem. Controlling behaviours are not, however, the necessary opposite of these. Wyness (1994) speaks of the ‘positive parental control’ involved as parents aim to
help their children negotiate the ‘uncivil society’ that they perceive to be lying in wait for them. Thus, control behaviours can be characterised as stressing order and conformity, offering clear guidance and establishing rules, as well as implying the more negative aspects of punishment and discipline. Rollins and Thomas (1979) were among the first to note that high levels of parental support and moderate levels of overall parental control were associated with non-problem behaviours.

A family history of alcohol problems has been found to be associated with alcohol problems in adults (Sher, 1987), and there is some evidence to suggest that parental alcohol abuse is predictive of alcohol problems among adolescents and young adults (Martin and Pritchard, 1991). The possibility of transmission of alcohol problems across generations is theorised to be due to several factors beyond genetics, including the effects of modelling, ineffective monitoring by the parent of their child’s peer group development and negative affect experienced by the child (Chassin et al., 1996). Early initiation of drinking has been identified as an important risk factor for later alcohol related problems (Hawkins et al., 1997). However, family history of alcohol abuse and alcoholism alone may not be adequate to predict drinking patterns among children of parents with such drinking behaviours (Reifman et al., 1998). Interestingly, animal studies (McKinzie et al., 1996) and studies of twins and adoptees demonstrate that genetic factors influence an individual’s vulnerability to alcoholism (Hrubec and Omenn, 1981). Children of alcoholics are significantly more likely than children of non-alcoholics to initiate drinking during adolescence (Chassin et al., 1991) and to develop alcoholism (Cotton, 1979). Despite publicly suggesting parents no longer are connected to their young adult children, parents continue to have an influence on their college-age children (Booth-Butterfield and Sidelinger, 1998; Wilks, 1986).

Most studies on the role of peers in adolescent alcohol consumption ignore the fact that siblings are an important source of influence for many adolescents (Engels et al., 2005; Epstein et al., 1999). Particularly when siblings are close in age and spend time together at home or outside the home without parental supervision, they can act as important role models. Cross-sectional studies have shown similarities in drinking between adolescent
siblings (Brook et al., 1990; D’Amico and Fromme, 1997; Duncan et al., 1996; Windle, 2000). Conger and Rueter (1996) suggest that siblings also play an indirect role in adolescents’ alcohol use; i.e. siblings’ drinking tends to affect adolescents’ selection of drinking friends, which in turn predicts adolescents’ alcohol use later in adolescence. In contrast to the effects of friends’ drinking which might stem from peer selection or peer influence processes, the effects of siblings’ drinking cannot stem from selection effects.

Besides friends and siblings, other peers might play a role in the adolescent’s social environments. Adolescents interact not only with their own friends, but also with friends of their siblings. Thus, in addition to alcohol use of friends and siblings as important sources for adolescent drinking, siblings’ best friends might also play a role in adolescent drug use. As with friends and siblings, the alcohol norms and actual drinking of the friends of siblings might have not only an indirect effect on the other sibling’s behaviour but also have a direct effect, especially if the contacts between friends and siblings are intense (Poelen et al., 2006).

2.4.3 Influence of Advertising

Alcohol advertising fashions the beliefs, attitudes and behaviours of young people through role modeling (Slater et al., 1996). Adolescents and young adults learn to behave by imitating public figures they identify with for their physical attractiveness and age. Humour and music are especially appealing to adolescents and most advertisements for alcoholic beverages try to demonstrate both these traits (Grube et al., 1996). Children with firm plans to drink as an adult, see more beer commercials, recognise them, recall the brands and have strong attitudes about the social role of beer, regardless of how their parents drink, or their gender or age (Wallack et al., 1990). For many, adolescence is a vulnerable stage, where independence from family and acceptance by peers, especially same-sex peers, is important. Advertising that reinforces the link between drinking and being accepted by peers is likely to have a strong appeal (Wyllie et al., 1998a).

The alcohol industry, not unlike the tobacco companies, maintains the purpose of its advertising is to retain product loyalty or to induce people to switch brands – not to lure
new customers (Beaver, 1997). Advertising for alcohol and cigarettes associates these products with similar qualities and traits – sex appeal, rebelliousness, sophistication – that adolescents admire (Shadel et al., 2002; Jackson et al., 2000). Branded clothing, accessories, and other promotional items offer opportunities to “try on” the image of a drinker or smoker (McClure et al., 2006; Feighery et al., 1998). A preference for beer-branded items was correlated with adolescents’ expectations about the positive consequences of drinking and with the frequency of drinking alcohol in the past month (Henriksen et al., 2007). Event sponsorships also represent alcohol and cigarette brands as part of the entertainment and sporting cultures of adolescents (Casswell, 2004; Rosenberg and Siegel, 2001). Indeed, marketing strategies for alcohol and cigarettes share at least one common objective – to increase the likelihood of product trial among never users (Henriksen et al., 2007).

Alcohol advertising is present in various media outlets. It creates an impression that young people can relate to, through the advertisement of fantasy places, lifestyle and personality characteristics (Taylor, 2003). The drinks industry has also introduced new designer drinks; an increase in the alcohol strength of their products; the use of sophisticated advertising and branding techniques; and the opening of new drinking outlets (Jackson et al., 2000). In turn, this has resulted in more positive expectancies about alcohol, which can change actual consumption behaviour. For a community of youths, such as a college campus, alcohol advertising could increase alcohol consumption for the community (Saffer, 2000). Strasburger (1997) states that youthful drinking would remain problematic as long as the industry continues to attract teenagers by advertising sars such as frogs and party dogs. By using such characters to promote their brands, these brands become synonymous with having fun and enjoyment leading to increased brand awareness among teenagers in particular.

As well as promoting brands, advertising is also concerned with recruiting new drinkers and increasing sales among existing, and especially heavy drinkers. Intensive advertising and promotion of alcohol appears to sanction and legitimise the use of the product, which causes high levels of damage to individuals and communities, especially in college (Taylor, 2003). By definition, alcohol advertising is one-sided, avoiding any reference to
the negative aspects of alcohol consumption. There is in fact some evidence that bans on alcohol advertising can have a beneficial effect on the level of harm caused by alcohol, at least in the longer term (Institute of Alcohol Studies, 2003).

In a study by Zinser et al., (1999) concerning memory recall and attitude ratings towards alcohol, cigarette, and other product advertisements, it revealed that college students recall alcohol advertisements, particularly beer advertisements, more than any other advertisements. Another study by Parker (1998) examined how college students perceived alcohol advertisements. Using a meaning based model of advertising to understand the role of alcohol advertising; students’ life themes; personal conflicts; view of self; and view of others were assessed with hopes of revealing and understanding the way college students experience alcohol advertisements, not statistically, but in the context of their lives. Parker (1998) found that alcohol advertisers were able to tap into the life themes and myths on the products and services offered and that college students were able to identify with these life themes and myths in their own lives. The life themes identified to college students as most important involve danger and mystery.

Overall, people exposed to greater amounts of alcohol advertising tend to engage in heavy drinking, problem drinking and hazardous drinking (Atkin et al., 1983; Bruun and Edwards, 1975; Mosher and Wallack, 1981). Of those studied, 33% who had a “high exposure” to alcohol advertising reported having five or more drinks in a single day, compared to 16% who had “low exposure” (Atkin et al., 1983).

Section 2.5 of this chapter will take a more detailed look at alcohol advertising and how the alcohol industry uses various alcohol marketing tools such as promotions, sponsorship of events etc. to promote their brands.

2.4.4 Rite of Passage to Adulthood

According to Schulenberg and Maggs (2002), most people view late adolescence and early adulthood as a time when drinking is common and accepted. Among those who drink, the large majority perceive social and coping benefits accruing from alcohol use and even occasional heavy drinking. They tend to limit their drinking such that it
interferes little with work and school responsibilities and they will diminish their heavy drinking as they move into adult roles. Although many experience negative consequences, most make it through their 'prime drinking years' with, in general, more positive experiences with alcohol than negative ones (Schulenberg and Maggs, 2002). At the same time, alcohol use becomes problematic and tragic for many. Heavy drinking, alcohol-related problems and associated risky and illegal behaviours peak during late adolescence and early adulthood (Baer, 1993; Johnston et al., 2001a; 2001b), as do problems with substance abuse in general (Glantz et al., 1999; Johnston et al., 2001a; 2001b). This period is an important juncture in the development of alcohol misuse and alcoholism, a time when initiation and escalation of heavy drinking may set the stage for lifelong difficulties (Babor et al., 1992).

The passage into young adulthood is a critical time during which diversity in life trajectories increases (Schulenberg et al., 2000; Sherrod et al., 1993). For many this period begins when the young adult moves away from home to begin college and live in student residences. As with other developmental changes, this transition involves both gains and losses (Baltes, 1987; Cantor and Langston, 1989), such as new friendship networks, but separation from family and old friends; more academic choices, but new academic demands; and increased independence, but decreased parental guidance and support. Amid all these transitions, alcohol use and heavy drinking tend to escalate, a co-occurrence that is far more than coincidental.

College attendance greatly improves lifetime occupational prospects and earnings and, when attended full-time, also postpones adult roles such as full-time worker, spouse and parent (Marini, 1987). An extended passage toward adulthood can have many non-educational benefits, including an opportunity to learn, explore ideas and pursue personal and academic interests (Pascarella and Terenzini, 1991). Likewise, individuals can experiment with various behaviours, values and lifestyles. The college experience can provide a safe haven for exploration (Arnett, 2000; Sherrod et al., 1993). Cultural norms promote heavy drinking as a rite of passage during the undergraduate years (Prentice and Miller, 1993). The desire to make new friends and to participate in the mythical college experience may lead to socially motivated heavy drinking (Cooper et al., 1998; Maggs,
The stressful aspects of adapting to a new social world and heavier academic demands may also promote alcohol use to help students relax (Windle, 1992).

In the transition to college, individuals begin as adolescents and end as young adults; they change from second level to third level education, sibling to roommate, child in a family to adult in an apartment. When multiple transitions overwhelm coping capabilities, well-being may suffer (Maggs, 1997). Health risk behaviours including substance use may serve as alternative coping strategies (Damphusse and Kaplan, 1998; Pandina et al., 1990). As Maggs (1997) reported, alcohol use during the transition to college may help to achieve valued social goals, such as making new friends, yet may threaten safety and short/long term health and well-being. Alternatively, substance use can be used to avoid transitions, such as remaining as a ‘full-time’ undergraduate student for five, six or more years and thus delaying adult roles and responsibilities.

By the end of high school, most adolescents have attained full adult height and reproductive capacity. Hormonal changes and societal expectations combine to increase adolescents’ interest in romantic and sexual relationships (Udry, 1990) and their tolerance of alcohol (Spear, 1999). Alcohol use may be related with early sexual experiences in several ways. The desire to get to know potential partners may lead individuals to seek out social contexts where alcohol is served, and positive expectancies about the social and sexual enhancement properties of alcohol can increase motivations to drink (Cooper and Orcutt, 1997). Alcohol consumption in turn can make sexual behaviours in general and unsafe behaviours in particular more likely to reduce inhibitions, giving courage and providing an “excuse” for getting drunk (Dermen et al., 1998). Just as new intimate relationships can increase alcohol use, the transition into more committed relationships, such as marriage, can decrease it (Leonard and Rothbard, 1999). Indeed, this general ‘marriage effect’ appears to explain normative age-related decreases in alcohol and other drug use (Bachman et al., 1997). The early twenties are also when peak physical functioning occurs e.g. heart and lung strength, athletic performance (Arnett, 2000), making it more possible to overcome alcohol’s physical effects quickly (Spear, 2000). Individuals (particularly girls) who mature earlier are more likely to associate with older, more “deviant” peers (Magnusson et al., 1986), setting the stage for increased alcohol and
other drug use. Alcohol use can also be seen as an attempt to appear older (Jessor, 1992) with adolescents aware of adult status privileges and viewing the ability to obtain alcohol as a desired privilege of adulthood.

Alcohol expectancies refer to the expectations individuals have for the positive and negative outcomes of drinking alcohol. With age, adolescents become increasingly aware of potential benefits of drinking alcohol and become less convinced of costs or risks (Johnson and Johnson, 1996; Maggs and Schulenberg, 1998). Children may accept blanket adult statements that alcohol is bad for people under the age of 21. However, college students often view such messages as hypocritical, especially when they conflict with common cultural behaviours. As a result, programmes and messages targeted at college students need to be realistic about the ineffectiveness of prohibition approaches. In many cases, harm reduction approaches should be seriously considered instead (Marlatt, 1998).

Although identity exploration is normative and healthy, it may represent a risk factor for experimentation with risky behaviours. The role played by alcohol use in adolescent and young adult lives is paradoxical. Despite the possibility of serious harm, drinking may also serve important constructive functions, such as helping to make friends or to explore personal identities (Chassin et al., 1989; Jessor, 1992). As a result, some have questioned the wisdom of attempting to limit experimentation and exploration because this may leave individuals without a self-determined commitment to identity and to personal values (Baumrind, 1987; Marcia, 1994).

2.4.5 College Factors that Influence Drinking

Heavy episodic or binge drinking has been recognised as a major problem on American college campuses by college presidents, alcohol researchers and the National Institute on Alcohol Abuse and Alcoholism and the US Surgeon General (Kuo et al., 2003). Alcohol availability is associated with increased alcohol consumption among the general population as well as among young adults and other adolescents (Gruenewald et al., 1992; Gruenewald et al., 1993; Jones-Webb et al., 1997). Heavy alcohol consumption by
college students and others is encouraged by a "wet" environment, in which alcohol is prominent and easily accessible (Weitzman et al., 2003a). This environment includes alcohol promotions, price specials, and advertising at drinking establishments that serve alcohol for on-premise consumption as well as retail outlets that sell alcohol for off-premise consumption (Kuo et al., 2003).

It has been more than 55 years since Straus and Bacon (1953), first reported that alcohol on college campuses presented problems to college and university administrators. More recently, in 1989, a survey found that more than 67% of college presidents rated alcohol misuse to be a "moderate" or "major" problem on their campuses (Carnegie Foundation for the Advancement of Teaching, 1990), describing alcohol misuse as the single greatest threat to quality of campus life. For years, one response that college and university officials offered regarding drinking in college was that alcohol use and even misuse was a developmental rite of passage for students and that, if left alone, these students would pass through these stages of involvement with alcohol, without great injury or harm (Jessor and Jessor, 1975).

Brennan et al., (1986) asserted that "there is still a great deal to be learned about university campus culture as it interacts with demographic and personality variables to influence the use and abuse of alcohol". In their research, Shore et al., (1983) also surmised that campus factors can affect drinking habits of college students. They found that resistance to peer pressure to drink and the desire to refrain from drinking were more intensely related to college environmental variables than to personal background variables. Moos (1976) found that although many individuals can resist environmental influences, some collegiate environments are powerful enough to influence almost everyone. Shore et al., (1983) suggested that the recognition that campus life is isolated or in some way insulated from the "real world" has been one of the most important factors focusing on immediate environmental variables over earlier developmental influences such as religious orientation or parents' drinking habits.
Many studies indicated that women generally consume less alcohol, engage in high/heavy episodic drinking episodes less frequently and experience fewer negative consequences than men in institutions of higher education (Presley et al., 1996a; 1996b; 1995; Wechsler et al., 1994; Presley et al., 1993; Engs and Hanson, 1985). The first study to examine the prevalence of women’s drinking and the correlates of women’s drinking at women’s colleges was Wechsler et al., (1995a). This study of 508 women found that women at women’s colleges engaged in high-risk drinking (defined as four or more drinks in a row in the previous 2 weeks) less frequently and had fewer alcohol-related problems than women at co-educational institutions.

Fromme and Ruela (1994) found that although parents and peers were both influential in defining standards of drinking, peers were more influential in terms of affecting actual drinking behaviour. The authors suggested that normative influences vary for college students depending on where they reside while attending college. In a survey of 606 Rutgers University undergraduates, O’Hare (1990) found that there were differences in drinking rates depending on the living arrangements. Commuters living at home were more likely to be lighter drinkers than students who lived on campus. O’Hare (1990) also found that women living independently had higher rates of heavy drinking than women living at their parents’ home. Similarly, a study conducted by Harford et al., (1983), suggests that the number of roommates was significantly related to drinking contexts. Students living at home were more likely to drink in nightclubs and bars, with residence-hall students more likely to drink in large, mixed-gender groups in their residences.

Among the problems associated with these high levels of alcohol use is what has been termed “second-hand” effects (Wechsler et al., 2002). Wechsler et al., (1995b) found that non-binge drinking students residing on campuses, where more than half of students were binge drinkers, were twice as likely to experience second-hand effects as non-binge drinkers living on campuses with fewer binge drinkers. These second-hand effects include having sleep or study interrupted, having to take care of a drunken student, being insulted or assaulted, being the victim of unwanted sexual advances, or having personal property vandalised.
Toomey and Wagenaar (2002) proposed a number of different topics for discussion amongst college campuses. Should alcohol be allowed on campus? Should alcohol be allowed at academic functions and/or social functions? Does alcohol on campus facilitate the academic mission or does alcohol get in the way of the mission? Should the campus profit from alcohol sales and promotion on campus? Regardless of when and how alcohol is used on campus, a variety of strategies can be used to de-emphasise alcohol on campus. For example, colleges may elect to avoid sponsorship of campus events by alcohol retailers or producers; campus newspapers/magazines can restrict alcohol advertisements and promotions and college newspapers/magazines can also prioritise reporting stories about alcohol related problems on and around campus. Although many students are weekend drinkers and drink primarily on Fridays and Saturdays, some students begin their weekends on Thursdays, as many campuses do not schedule classes on Fridays (Toomey and Wagenaar, 2002). To address this issue, some colleges schedule classes on Friday mornings and mandate classroom attendance (i.e. attendance at labs contributing to final assessment mark), which forces students to prioritise academic commitments through Friday (Rabow and Duncan-Schill, 1995). Chaloupka and Vechsler (1996) also found that working students were less likely to be involved in high-risk drinking as they have less time and opportunity to do so.

There are a number of college factors, as mentioned, that influence drinking among college students. Heavy alcohol consumption is encouraged by a “wet” environment and also through the recognition that campus life is isolated or in some way insulated from the “real world”, thus delaying adult roles and responsibilities. Peers were also found to be more influential in terms of affecting actual drinking behaviour and students who lived away from home whilst attending college had higher rates of heavy drinking than students still residing with their parents.

4.4.6 Alcohol Price and Availability

Every college or university has an institutional culture that differs from that of every other institution, whether it is based on student demographics, entrance requirements,
cost, traditions, competitiveness, athletics, size or region of the country (Presley et al., 2002). However, there are some other external environmental variables that may influence drinking. These factors include the availability of alcohol, pricing, density of distribution outlets (i.e. bars, off-licences) in the area surrounding the campus, the social settings where drinking takes place and campus customs. Such factors all play a role in shaping the drinking environment for students (Newman et al., 1991).

Human drug use is reliably related to price or response cost, levels of substance-free reinforcement, relative reinforcement value, and delayed reward discounting (Bickel and Marsch, 2001; Tucker, et al., 2006). Behavioural economics assumes that individuals make choices that maximise overall utility (i.e. happiness, satisfaction), but that the choice dynamic is critically dependent on the temporal context of the decisions (Vuchinich and Heather, 2003). Drug choices will often maximise utility if the time frame for maximisation is short. For example, for a college student, binge drinking on one particular day, will likely maximise utility for that day compared to studying or engaging in some other constructive activity (Heyman and Dunn, 2002).

To reduce overall levels of alcohol consumption and change patterns of risky alcohol use, communities, colleges and other institutions can place restrictions on where and how alcohol is sold and distributed, how much alcohol costs and where alcohol is consumed (Toomey and Wagenaar, 2002). Research studies show that restricting availability of alcohol leads to decreases in alcohol consumption among the general population (Edwards et al., 1994). Chaloupka and Wechsler (1996) specifically studied college students and found higher levels of drinking, drinking participation and high-risk drinking among underage and older college students when a larger number of businesses were selling alcohol within one mile of campus. Numbers of outlets may be restricted directly by making licenses more difficult to obtain, by increasing their cost and giving the courts more power to reduce the number of licenses within a designated area (Toomey and Wagenaar, 2002).
As with preventing illegal alcohol sales to underage students, owners and managers of alcohol establishments can implement policies that instruct staff on how to prevent patrons from becoming intoxicated and refuse sales to obviously intoxicated customers (Toomey et al., 2001). A recent study found that 79% of US alcohol establishments will serve alcohol to patrons who appear obviously intoxicated (Toomey and Wagenaar, 1999), despite laws prohibiting such sales. Examples of policies that management can implement are serving alcohol in standard sizes, limiting sales of pitchers of alcohol, cutting off service of alcohol to intoxicated patrons, promoting alcohol-free drinks and food and eliminating last call announcements.

All types of drinkers appear to be affected by price, but the heaviest drinkers may be less affected by variations in price than other consumers (Manning et al., 1995). However, heavier drinkers in young populations are more affected by price than heavy drinkers in the general population (Godfrey, 1997; Chaloupka and Wechsler, 1996; Sutton and Godfrey, 1995; Kenkel, 1993). Grossman and Markowitz (1999) evaluated the effect of the price of beer on violence among college students. Using self-report data from 122,416 students from 191 US colleges and universities from 29 US states, they found that higher price for beer was associated with lower incidence of; 1) getting into trouble with police or college authorities; 2) damaging property or pulling a fire alarm; 3) having an argument or fight and; 4) being taken advantage of or taking advantage of someone sexually. Placing excise taxes on alcohol is another type of policy that affects price. Using national samples of youth, several studies indicate that raising alcohol excise taxes has particularly large effects in reducing youth drinking. Higher beer taxes are associated with less frequent drinking among 16 to 21 year olds (Coates and Grossman, 1988; Grossman et al., 1994).

Kuo et al., (2003) found in their survey that the lower the price of beer in the surrounding community, the higher the binge-drinking rate in colleges. This is consistent with previous findings that alcohol consumption by young people is affected by price. In general, as the price of alcohol increases, consumption rates decrease (Levy and Shefflin, 1983). Conversely, as the price of alcohol decreases, consumption rates increase.
Moreover, young people are more affected by price of alcohol (Kenkel, 1993). Alcohol outlets near college campuses commonly use various discounts and promotions to attract students, and alcohol promotions and specials may increase consumption (Kuo et al., 2003). Babor et al., (1978) found that both heavy and light drinkers drank more than twice as much alcohol during stimulated “happy hours” as they did during times without such promotions.

Murphy and MacKillop (2006) used a hypothetical Alcohol Purchase Task to construct demand curves that directly quantified the influence of drink price on consumption in a sample of 267 college student drinkers. Participants reported the number of standard drinks they would consume at various drink prices during an evening at a bar. Average reported consumption was 7 standard drinks when drink price was $0.25 or less and remained at or above 5 drinks at prices up to $1.50 per drink. However, the plotted demand curves revealed that consumption was elastic in that it decreased by approximately 1.5 standard drinks per dollar price increase in the $1 to $4 price range. Chaloupka (1993) found that increases in alcohol beverage prices leads to substantial reductions both in the frequency of youth alcohol consumption and in heavy drinking among the young. Chaloupka et al., (1998) expanded the concept of price and economic impact to include not only the monetary price of alcoholic beverages, but also a wide variety of other “costs” of drinking and heavy drinking; including time spent obtaining alcohol and legal costs associated with drinking-related behaviour. This research clearly demonstrates that increases in total cost can significantly reduce consumption and thereby many of the problems associated with alcohol use and misuse.

Another way to raise the price of alcohol is to intensify the natural negative consequences associated with drinking (Murphy et al., 2007). Most college students attend class for fewer than 20 hours per week and have an abundance of leisure time, which is a risk factor for heavy drinking (Wechsler et al., 1995a). This might enable students to drink heavily with only minimal impact on their academic performance (Paschall and Ireithler, 2003). Increasing mandatory class time or instituting significant service learning requirements would reduce students’ leisure time and might increase the real
price of drinking by making it more difficult to drink heavily without infringing upon academic demands (Murphy et al., 2007). Indeed, there is evidence that students' drinking levels are highest when academic demands are low (i.e. early in the semester and during semester breaks) and lowest when academic demands are high (i.e. during final exams) (Del Boca et al., 2004). Students who have early classes on Friday morning drink significantly less on Thursday nights than students with later or no class times (Wood et al., 2005). Students who devote time to volunteer work are at lower risk for binge drinking (Weitzman and Kawachi, 2000).

Outlet density and drinking venues is a concept that has risen to the forefront of the prevention research agenda, going beyond the previously described factors related to drinking risk and looking at the environmental context of drinking (Clapp et al., 2000). Colleges with large numbers of binge drinkers are characterised by greater visibility and availability of alcohol in their environment (Wechsler et al., 2002). College students' binge drinking is associated with the degree of ease of access to alcohol, location of a bar within a mile from campus, price and alcohol control policies (Wechsler et al., 2000a). Higher outlet densities increase perceived availability of alcohol, lower total cost to the drinker (including travel time), increase consumption of alcohol and increase violence and other crime and disruption associated with drinking (Abbey et al., 1990; Berman et al., 2000).

In their studies, Clapp et al., (2000) found that parties, socialising and being with friends were the most common situations where students reported their last heavy drinking event took place. Similarly, in a broader national study of drinking contexts, Hilton (1991) reported that across all types of consumption patterns, the presence of co-workers, close friends and neighbours increased the amount of alcohol consumed. According to Gruenewald (1999), research has shown three things: (1) population growth leads to a greater number of alcohol outlets; (2) greater numbers of outlets relate to greater alcohol use and; (3) greater use results in alcohol related problems. His research found that, when outlet concentrations increased and multiple drinking venues existed, both long-term and short-term drinking problems also increased.
This is concerning especially when extensive research by Toomey and Wagenaar (1999), shows that the availability of alcohol within a community influences drinking rates and related problems. Discount pricing of alcoholic drinks and promotion of alcoholic beverages have been linked to consumption among college students (Chaloupka et al., 1998; Wechsler et al., 2000a). In addition, Kuo (2003) surveyed a sample of alcohol outlets surrounding 119 campuses in the 2001 College Alcohol Survey and found that higher alcohol availability, as reflected in price and promotions, was associated with higher drinking levels. Lower rates of binge drinking exist among students at schools whose administrators report an absence of alcohol outlets within a mile of campus (Wechsler et al., 1994). Recent figures released by the National Off-Licence Association in Ireland show that the number of general drink sales outlets has trebled in the past seven years. There has been an increase of 14% in the number of off-licences opened between 2005 and 2007 alone (CSO, 2008).

This section of the study has dealt with the motives that induce college students to drink. We will now examine in more detail the specific role that alcohol advertising has played in increasing alcohol consumption among college students and also among the general population.

2.5 Alcohol Advertising

Drinks companies use the most powerful form of communication in the world to promote their products to the mass market (Dibb et al., 1997). Advertising and mass media in general seem particularly well suited to adolescents, in many ways the most prized advertising audience and often thought to be readily influenced by the media. In general, the alcohol industry adopts a fairly straight-forward marketing strategy, portraying qualities and traits such as sex appeal, rebelliousness and sophistication in the majority of its campaigns. There is an enormous wealth of evidence that alcohol advertisements are related to positive attitudes and beliefs about alcohol amongst young people (Wyllie et al., 1998b; Grube and Wallack, 1994). In addition, the content of advertisements is related to expectancies about the use of alcohol amongst young people and the role of
alcohol in their lives. Young people are particularly drawn to elements of music, characters, story and humour. Young people who like alcohol advertisements believe that positive consequences of drinking are more likely; their peers drink more frequently; and their peers approve more of drinking (Hibell et al., 2000). These beliefs interact to produce a greater likelihood of drinking, or of intention to drink in the near future. Wyllie et al., (1998a) also demonstrated that young people perceived alcohol advertisements to link alcohol use with having a good time. Hibell et al., (2000) stated that the adolescent’s belief that alcohol contributes to having fun appears to be prevalent. Alcohol promotions such as free alcohol, cheap alcohol and strong alcohol encourage high risk drinking which contributes to increased risk of alcohol related problems (Hope et al., 2005).

Alcohol marketing is sophisticated in its methods, exceptionally well funded and powerful in its impact on young people including young adults, adolescents and those who have not yet tried alcohol (Jackson et al., 2000; Jernigan, 2001). Alcohol marketing places alcohol as a defining feature of youth culture, linking alcohol with social and sexual success. Alcohol marketing also undermines efforts to communicate health promotion messages to young people (Hope, 2004). In the wider environment, alcohol marketing affects social norms about drinking throughout society (WHO, 2003). Young people are influenced by exposure to repeated high-level alcohol promotions demonstrating pro-drinking attitudes which increases the likelihood of heavier drinking (Babor et al., 2003). Alcohol advertising promotes and reinforces positive attitudes about drinking and portrays drinking as fun, glamorous and risk free. In Ireland, research showed that children were strongly attracted to alcohol advertising and that young people believed that advertisements were targeted at their age group (Dring and Hope, 2001). They also stated that girls are more inclined to state that alcohol advertisements would encourage others of their own age to drink, especially non-drinkers.

Research suggests that beer and wine’s advertising appeal may be attributed in part to message features such as colour, music, action and humour (Aitken et al., 1988). The images associated with the marketing of alcohol often make the products and their users
seem attractive, exciting, successful, and sophisticated. Schooler et al., (1996) found that alcohol advertisements offer appealing social cues such as attractiveness and social rewards. To shed light on the effects of alcohol advertising, some researchers have turned to content analysis to understand better the way alcohol advertisers use visuals, messages, and themes in advertisements (Domzal and Kernan, 1992; Strickland, 1982; Breed and DeFoe, 1979). Content analysis of advertising messages has revealed ‘cultural myths’ – commonly held beliefs about the culture (Levy, 1981). Advertisers do not create the cultural myths used in advertisements; they simply employ myths of the culture to promote their products. Postman et al., (1987); Strate (1991) and Domzal and Kernan (1992) concluded that alcohol advertisers often use such consumer mythology in their advertisements. Postman et al., (1987) and Strate (1991), for example, ascertained that advertisers often equate beer consumption with manliness and that beer is a necessary element for fitting into society. The table below illustrates such myths.

<table>
<thead>
<tr>
<th>Myth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer as a reward for hard work or play</td>
</tr>
<tr>
<td>Involvement of beer in rites of initiation</td>
</tr>
<tr>
<td>Use of beer in gaining social acceptance</td>
</tr>
<tr>
<td>Use of beer to facilitate interaction between the sexes</td>
</tr>
<tr>
<td>Beer as “health food”</td>
</tr>
<tr>
<td>Challenge of nature</td>
</tr>
<tr>
<td>Physical challenge of labourers and athletes</td>
</tr>
<tr>
<td>Male bonding</td>
</tr>
<tr>
<td>Manhood</td>
</tr>
</tbody>
</table>

Table 2: Myths found in beer advertisements (Postman et al., 1987; Strate, 1991).

The cultural myths and symbols used in alcohol advertisements have powerful meanings for college students (Saffer, 2000). The Robert Wood Johnson Foundation (1999) maintains that alcohol advertising and marketing are factors in the environment that help create problems of underage drinking and college high-risk drinking. There is, however, very little empirical evidence that alcohol advertising has any effect on actual alcohol
consumption (Fisher, 1993; Nelson, 1999). A study by Crawford and Gramm (1985) also found that there is no reliable basis to conclude that alcohol advertising significantly affects consumption, let alone result in serious alcohol consumption. A study of alcohol advertising conducted by Wilcox et al., (1986) in the University of Texas over a 21-year period found that the amount of money spent on alcohol advertisements had little relationship with total consumption in the population.

A substantial body of research on the effects of advertising and promotion on alcohol consumption and its consequences has produced findings that are mixed and inconclusive (Grube, 1999). Many people believe that advertising does increase alcohol consumption and there is some evidence of a correlation between exposures to alcohol advertising and drinking by young people (Atkin and Block, 1981; Atkin et al., 1984), and that there is a causal link between alcohol advertising and excessive alcohol consumption (Atkin, 1987; 1995; Lastovicka, 1995). With some notable exceptions (Saffer, 1997), experimental studies have produced little evidence that alcohol advertising affects drinking beliefs, behaviours, or problems among young people. Recent survey evidence shows that young people's awareness of, and affect from certain commercial messages about alcohol are correlated with their drinking beliefs and behaviours (Austin and Nach-Ferguson, 1995; Slater et al., 1996), but results are inconclusive. That is, it is possible that advertising affects young people's drinking beliefs and behaviours or, conversely, that pre-existing predispositions to drink increase attention to alcohol advertising.

Most researchers agree that alcohol advertising is but one of many influences on the initiation or establishment of drinking patterns. Price, availability and social influences have been found to also affect consumption (Bruun et al., 1975; Ornstein and Hanssens, 1985). Evidence suggests that advertising is of less importance than other influences such as parental attitudes/examples and group peer pressure (Hill and Casswell, 2001). Nevertheless, although research is inconclusive, and even in the absence of compelling evidence of causation, the assumption that there is no legitimate basis for limiting the exposure of young people to alcohol advertising is wrong (Long, 2005).
2.5.1 Alcohol Advertising in Ireland

In Ireland, alcohol advertising is governed by voluntary codes or self-regulation. The codes of advertising set down certain guidelines to protect young people. However, during the last decade alcohol advertising has increased in volume, as reflected in the advertising spend, from €25.8 million in 1996 to €43.2 million in 2002 (Association of Advertisers of Ireland, 2004). The greatest increase happened in spirits advertisements between 1996 and 2000, coinciding with the introduction to the market of the new spirits based alcopops. The introduction of alcopops, with a strong sweet taste, disguising the taste of alcohol, attracted many young people to alcohol, especially females. Alcohol advertising also extended its scope by advertising alcopops on television, despite the voluntary code that spirit drinks would not be advertised on television.

A study was undertaken in 2000, asking young people how they perceived alcohol advertisements and whether the advertisements were in compliance with the codes. The results suggest that alcohol advertisements did infringe the codes in a number of ways. These include linking alcohol use with social or sexual success, depiction of immoderate drinking, use of characters that appear to be under 25 years of age, implying that alcohol had therapeutic effects or improved physical performance and alcohol advertisements targeted at young people (Dring and Hope, 2001). The content of beer commercials which tend to portray beer drinkers as young, sexy, successful and active (Strasburger, 1995) has been criticised in the past as that image is exactly the one many adolescents strive to project. A recent study on the impact of alcohol advertising on teenagers in Ireland (Morgan, 2001) found that alcohol advertisements were identified as their favourite by the majority of those surveyed (aged 12 plus). Surprisingly, most of the teenagers believed that the majority of the alcohol advertisements were targeted at young people. This was because the advertisement depicted scenes – dancing, clubbing, lively music and wild activities – identified with young people. The teenagers surveyed interpreted alcohol advertisements as suggesting, contrary to the code governing alcohol advertising, that alcohol is a gateway to social and sexual success and as having mood altering and therapeutic properties.
In 2003, the Drinks Industry Group established a Central Copy Clearance company to vet alcohol advertising prior to launch to ensure compliance with the voluntary code, illustrating the deficiencies of the self-regulation system (Kenny, 2004). The Commission on Liquor Licensing (2003) points to the excessive amount of advertising directed towards the younger person. The drinks industry obviously considers advertising to be effective as is evidenced by regular and costly sponsorship and advertising campaigns. According to the National Youth Federation (2003), there is a need to prohibit the continued link and sponsorship by alcohol companies of all sporting events.

2.5.2 Alcohol Advertising Internationally

If alcohol companies are not targeting young people, abundant evidence shows that a large proportion of these commercial messages and promotional activities do, in fact, reach underage audiences (Long, 2005). In the US, the current practice for some companies is to advertise between television programmes with an audience that is at least 50% adult. This routinely allows placement of alcohol advertising between programmes for which the percentage of underage viewers is higher than the percentage of underage drinkers in the US (Centre on Alcohol Marketing and Youth, 2002). The teenage market in the US is extremely lucrative. Teenagers are fashion and status conscious, and spend large amounts of money on clothing and entertainment, amounting to at least $95 billion a year (Peter and Olson, 1996). Many brand loyalties begin during adolescence and last through adulthood which makes the group even more important to marketers. A 1996 US study of children aged 9 to 11, found that children were more familiar with Budweiser’s television frogs than Kellogg’s *Tony the Tiger*, the *Mighty Morphin Power Rangers*, or *Smokey the Bear* (Leiber, 1996).

A study conducted by Grube (1995), explored the connections between children’s awareness of alcohol advertising and their knowledge and beliefs about drinking. The children’s awareness of alcohol advertising was ascertained through presentations of a
series of still photographs taken from television commercials for beer, with all references to the product or brand deleted. The children were asked if they had seen each advertisement and, if so, to identify the product being advertised. Children who were more aware of advertising had increased knowledge of beer brands and slogans as well as more positive beliefs about drinking. Although attempts were made to account for the possibility that prior beliefs and knowledge could affect the children’s awareness of the advertising, it is still possible that the relationship is due to children who hold more positive beliefs about drinking being those who are more aware of advertising.

Another study of 500 children in New Zealand aged between 10 and 17 years found that the degree to which the children liked a set of beer advertisements influenced how much they expected to drink at age 20 years (Wyllie et al., 1998a). Statistical analysis concluded that, while liking alcohol advertising influences current drinking status and intentions, the reverse does not seem to be true. In a similar study of an older age group, stronger results were reported in 1,012 randomly selected 18 to 29 year olds (Wyllie et al., 1998b). In this case, the more the respondents liked the alcohol advertisements, the more likely they were to drink at greater rates and to agree with positive belief statements such as “drinking is a good way to escape from the hassles of everyday life”. Most important, the more they liked the advertisements, the more they reported drinking problems such as getting into a physical fight because of drinking.

2.5.3 Alcohol Sports Sponsorship

More recent research reports that alcohol sports sponsorship has an effect similar to alcohol advertising. As noted by Babor et al., (2003), alcohol sports sponsorship links masculinity, alcohol and sport and provides promotional opportunities that go beyond passive images of alcohol advertisements. This serves to embed alcohol products into the everyday activities of the consumer through title name, sports results, commentary and discussion of the sporting events which in turn taps into and reinforces cultural identity (Babor et al., 2003).
Corporate sponsorship of special events is well recognised in the marketing literature as an important component of product promotion. Sports sponsorship in particular is an important and effective promotional tool (Gardner and Shuman, 1987; Mescon and Tilson, 1987; Ukman, 1984; Abratt et al., 1987). In the marketing literature, the primary reason given for corporations to undertake sports sponsorships is to achieve television exposure for their companies or brands. By the early 1990s, the drinks industry had developed sponsorship deals with many sporting, musical and cultural events around Ireland. According to Hope (2004), the current high visibility of alcohol sport sponsorships in sports with the highest youth participation (GAA, soccer and rugby) began in 1994 with the Guinness All-Ireland Hurling Championship and symbolised a major shift in a community rich in tradition and culture. The GAA sponsorship was shortly followed by the Heineken Cup (rugby) and the Carlsberg League (Irish soccer). Sponsorship deals of this type give in-depth exposure through event naming, product placement, sport commentary and discussions of the sporting events and embed the alcohol product into the daily lives of people. Alcohol sports sponsorship, linking alcohol, masculinity and sport, attracts young males, the groups most likely to be high risk and heavy drinkers (Babor et al., 2003).

According to McCaughren (2007), the Rugby World Cup, landmark new GAA deals and major sports events such as the World Rally Championships were set to push sponsorship spending in Ireland to over €100m in 2007. This marks a 12% increase on 2006, with several new deals expected by the end of 2007, according to a report by consultancy firm Onside Sponsorship. These new deals included Bank of Ireland sponsoring the Leinster rugby team and Adidas sponsoring Munster rugby. However the most unique and intriguing new sponsorship deal to have occurred in 2008 was the deal struck by the GAA for sponsorship of both the Hurling and Football All-Ireland Championships. Each championship now has 3 sponsors, whereas previously only one main sponsor was sought. The GAA Hurling Championship is now sponsored by Guinness, Ethiad Airlines and RTE Sport with the Football Championship being sponsored by Vodafone, Ulster Bank and Toyota. Research released by Onside shows that almost €6 in every €10 spent on sponsorship in Ireland is invested in sports-related sponsorships (www.onside.ie).
Onside Sponsorship also carried out a very interesting survey which demonstrated how effective alcohol sponsorship is in affecting Irish adults. As can be seen from figure 7 below, the most appealing sponsorships to Irish consumers are in the alcohol sector.

![Ireland's Most Appealing Sponsorships Amongst Irish Adults of 2007 – Top 10 Sectors](image)

**Figure 7** – Ireland’s most appealing sponsorships
Source: Onside Sponsorship, 2007 (www.onside.ie)

Figure 7 serves to re-emphasise how active the alcohol industry in Ireland is at sponsoring both sporting and music events. These sponsorships are recognised by the industry as an important component of product promotion and also enable companies in the industry attain a high level of exposure through event naming, product placement, advertising space and sport commentary (McCaughren, 2007).

### 2.6 Summary

In this chapter we have identified the health related issues associated with binge drinking. This section of the chapter noted that women are at an increased risk from alcohol use because they need less alcohol per kilogram of body weight than men to attain the same peak blood alcohol level and level of impairment. Binge drinking from a female
perspective was then examined and binge drinking motives such as impact of peers, family, advertising, college factors, price and availability of alcohol were examined in detail. The chapter then undertook a more extensive view of the role alcohol advertising has in the promotion of alcohol brands and products, with particular attention on advertising in Ireland.

In the next chapter we will examine certain approaches to preventing or reducing binge drinking among college students. This includes the use of social marketing and how it can be used through the use of public service announcements to ultimately try and reduce binge drinking. The chapter takes an in-depth overview of the use of fear appeals, both physical and social threat appeals, as well as looking at harm reduction approaches to reduce binge drinking.
Chapter 3

Approaches to Reducing Binge Drinking among College Students
3.1 Introduction

In this chapter of the study, we will examine the use of social marketing to influence behaviour change. The behaviour change that we are trying to influence is binge drinking. This chapter discusses in detail the use of public service announcements and whether these should incorporate physical threat appeals or social threat appeals. It also investigates what level of fear should be used in these appeals. The chapter concludes by detailing a harm reduction approach rather than a zero-tolerance approach that may be adopted by policy makers to ultimately try and reduce binge drinking rates.

3.2 Social Marketing

Social marketing is a framework or structure that draws from many other bodies of knowledge such as psychology, sociology, anthropology and communications theory to understand how to influence people's behaviour (Kotler and Zaltman, 1971). Both consider social marketing to represent a particularly challenging field of marketing given that the communicator often has to challenge the belief and value systems of the target market. Kotler and Zaltman (1971) expressed the opinion that belief and value systems are reinforced over time, making them more difficult to alter than the transient preferences of a consumerist society. The authors suggest that perceptual barriers may also exist towards Public Service Announcements (PSAs). Kotler and Zaltman (1971) maintain there will always be those who reject any message that promotes moral duty or social responsibility on the grounds that it represents an unwelcome and particularly manipulative addition to the "promotional noise" already in society. Andreasen (1995) also discusses social marketing and defines it as follows.

*Social marketing is the application of commercial marketing technologies to the analysis, planning, execution and evaluation of programs designed to influence the voluntary behaviour of target audiences in order to improve their personal welfare and that of society.*

(Andreasen 1995, p7).
The unique feature of social marketing is that it takes learning from the commercial sector and applies it to the resolution of social and health problems. It focuses on voluntary behaviour change, applying the principle of exchange - the recognition that there must be a clear benefit for the customer if change is to occur. Marketing techniques such as segmentation, targeting and the marketing mix should be used to improve individual welfare and society as a whole, not to benefit the organisation doing the social marketing. This is what distinguishes social marketing from other forms of marketing (MacFadyen et al., 2002). A recent UK government public health White Paper talks of the ‘power of social marketing’ and ‘marketing tools applied to social good’ being used to build public awareness and change behaviour (UK Department of Health, 2004).

Social marketing refers to the application of basic marketing principles to the design and implementation of programmes and information campaigns that advance social causes such as alcohol and other drug prevention (Long, 2005). Walsh et al., (1993) used social marketing programmes to address the issues of extensive drinking, unhealthy diet, lack of exercise, and the use of tobacco. A meta-analysis of 48 publicity campaigns by Snyder and Hamilton (2002) found that longer campaigns permitted people a longer period to initiate behaviour change. This was deemed important owing to the fact that different people displayed different rates of behaviour change. Research suggests that campaign intensity must reach a certain threshold before an audience notices it and goes on to process it cognitively (Cameron and Harrison, 1998).

Social marketing campaigns are popular interventions in reducing binge drinking in US universities and seem to have some effectiveness in influencing students' beliefs and behaviour (Vicary and Karshin, 2002). For example, Haines and Spear (1996) found that after a social marketing campaign, fewer students perceived binge drinking as the norm and a reduction in self-reported binge drinking was observed. Additionally, a recent multi-site randomised trial revealed that the relative risk of alcohol consumption was lower in students attending colleges that implemented this type of intervention (Dejong et al., 2006).
The involvement of peers in social marketing programmes has increased the perceived susceptibility, severity and benefits of various courses of action (Long, 2005). Rickert et al., (1991), in their evaluation of a US based peer-led AIDS education programme found that peer educators could positively influence adolescent attitudes. These findings are supported by Klein et al., (1994), who found that health discussions facilitated by peer educators promoted better understanding of health information, and appeared to be more likely to lead to behaviour change. Rosenthal-Gaffney et al., (1998), suggest in their findings that regardless of the level of alcohol consumed, students appear to have a similar need for peer approval. Following a review of PSAs, Dejong and Atkins (1995) concluded that PSAs targeting young people should portray adolescents of their own age in the advert. The PSA should also avoid any moralistic undertones and instead focus on the social consequences of binge or heavy drinking. Rosenthal-Gaffney et al., (1998) state that these findings support recent changes in alcohol prevention programmes, where the message is delivered by peers rather than adult authority figures (Botvin et al., 1990).

The role of mass media campaigns in reducing high-risk drinking among college students was investigated by DeJong (2002). DeJong (2002) identified three types of campaigns. First, information campaigns try to raise awareness of the problem, usually with the intent of motivating students to avoid high-risk alcohol use. Second, social norms marketing campaigns try to correct misperceptions of current drinking norms, based on the idea that if students no longer have an exaggerated view of how much alcohol their peers are consuming, fewer of them will be led to engage in high-risk drinking. Third, advocacy campaigns attempt to stimulate support for institutional, community or public policy change.

Information campaigns focus primarily on the negative consequences of heavy drinking. “Party Smart” was a media awareness campaign launched by Boston Mayor Thomas M. Menino as a response to the 1997 death of Scott Krueger, a student at the Massachusetts Institute of Technology, who died from alcohol poisoning after a fraternity party. Each of the advertisements for the poster and billboard campaign used a photograph taken from the view of a drinker, with the rhetorical tagline, “Remind you of last night?” One
shows the blurry image of a toilet, the apparent target of an intoxicated drinker who needs to vomit. Another, shows the splayed feet of a drinker lying in bed, the room spinning rapidly around him. A third shows a group of young women pointing and laughing at a drinker who has passed out or fallen on the floor. Information campaigns focusing on the negative consequences are unlikely to have much impact on college students’ alcohol consumption (DeJong, 2002). Students involved in high-risk drinking already know that alcohol misuse can lead to serious injury and death. They also know from their own experience, however, that dire consequences, while common enough to be noteworthy, are still relatively rare events, given that 81% of college students consume alcohol (Wechsler et al., 1998). As a result, serious injuries or death related to drinking are likely to be attributed to an error in the individual’s specific actions, rather than to predictable consequences of excessive alcohol consumption (Lerner, 1980). Most young people take good health for granted and many view long-term problems from their current drinking as too distant and unlikely to be of concern (DeJong, 2002). Also, many young people overestimate their own capacity to change their behaviour before long-term consequences become an issue (DeJong and Winsten, 1998).

Social norms marketing campaigns target college students who tend to overestimate how many of their peers engage in dangerous alcohol consumption. The disparity between actual and perceived drinking norms can be very large. If students believe that most other students drink heavily and seek to conform to that perceived norm, then collective rates of high-risk drinking will be sustained or even increase (Perkins, 1997). However, if students more accurately perceive how much drinking is really going on, then this should change the perception of the norm, which in turn should lead to reductions in high-risk drinking. The effort to get this message out using publicity events, student newspapers, posters, email messages, and other campus based media is called a social norms marketing campaign (Perkins, 1997). Northern Illinois University in the US implemented a five year programme to change perceptions of student norms regarding high-risk drinking (Haines and Spear, 1996). A subsequent student survey found an 18% reduction in perceived heavy episodic drinking (69.3% versus 57%) and a 16% reduction in actual heavy episodic drinking (43% versus 27%).
Advocacy campaigns target the many students who are tired of having the quality of their education and their safety compromised by the high-risk drinking of others, with the hope that they will channel their anger into advocacy (DeJong, 2002). An example of such a campaign is the “Had Enough” campaign in the US which was launched by the Centre for Science in the Public Interest (1997). “Had Enough” used newspaper advertisements, posters, and flyers to draw students to a website (hadenough.org), which then urges them to get involved in fighting binge drinking on their campus. The website was designed to reinforce the visitor’s negative opinion about high-risk drinking and provide a resource for students who want to “do something about it”. It offers general advice to students on how to address the problem, such as organising alcohol-free activities during orientation or joining a local coalition on alcohol issues, and provides a basic primer on the importance of institutional and government policy for addressing the problem (DeJong, 2002).

The main aims of the campaigns mentioned are to change the behaviour of target audiences in order to improve their personal welfare and that of society. According to models of the behaviour change process, change results when people are led through the following steps (Roberts and Maccoby, 1985):

1. Awareness – a media campaign needs to raise consciousness of the problem, prompt re-evaluation of personal risk and encourage consideration of individual or collective action.
2. Knowledge and Beliefs – the campaign must bring about a change in beliefs and attitudes about the behaviour being promoted. It is critical to anticipate and address the audience’s points of resistance.
3. Behavioural skills – behaviour change often requires the development of new skills (e.g. self-monitoring, refusal behaviours) which can be taught using media by modelling or step-by-step instruction.
4. Self-efficacy – the conviction that one can execute a particular behaviour is predictive of subsequent behaviour change. Observing others’ experience is an important way of developing efficacy expectations.
5. Supports for sustaining change – learning and maintaining a new pattern of behaviour requires that people know how to monitor their behaviour; apply self-reinforcement strategies; and anticipate, eliminate or cope with stimuli that trigger unwanted or competing behaviours. Mass communications can be used to teach these self-management techniques.

These steps mentioned could be incorporated into social marketing campaigns to influence behaviour change. For a change in behaviour to take place, it would be necessary to adopt the most appropriate steps as not every step will be required depending on the extent of the behaviour to be changed.

3.3 Public Service Announcements

Messages aimed at curtailing drinking are among the most common public service announcements (PSAs) produced, but generally are created for an “undifferentiated general audience” rather than those who are at greatest risk and young people in their teens and twenties are an especially difficult audience to reach (DeJong and Atkin, 1995). A study by Andsager et al., (2001), based on the message interpretation process (MIP) model explored how college students, a primary audience for alcohol-related messages, evaluate anti-drinking public service announcements and alcohol advertisements. Evaluations from 246 respondents regarding 10 alcohol-related advertisements and PSAs produced differences in quantitative and qualitative responses. Results suggested that perceived realism and themes that students could identify with are important factors in increasing the salience and persuasiveness of PSAs. The respondents’ free-recall responses suggested that realistic but logic-based PSAs were not as effective as unrealistic but enjoyable advertisements.

Flay and Sobel (1983) suggest that public service messages have failed to change behaviour because of the following: failure in reaching the audience; messages are directed at unidentifiable audience segments; too much reliance on fear and moral messages; drug users and those at risk of using are likely to avoid the typical anti-drink
public service announcements (PSA); and a lack of ability to stimulate interpersonal discussions regarding the issue of concern.

When the broadcast media emerged as a major force, many public health advocates assumed that the presentation of factual information through public communication campaigns would automatically change attitudes and lead to more health conscious behaviour (DeJong and Winsten, 1990). Subsequently, when several such campaigns produced disappointing results, this boundless optimism was replaced by the highly pessimistic view that mass media campaigns to change behaviour were doomed to failure. Investigators recognised that a campaign could reinforce existing behaviour, but this was viewed as the most that could be achieved (DeJong and Winsten, 1990). It should also be kept in mind that there exists a lack of high-quality evaluation research assessing the efficacy of mass media campaigns (Botvin, 1995).

A study by Treise et al., (1999) addressed the problems in communicating anti-drinking messages to college students and the need for greater insight into that group’s behaviour as a basis for developing more effective PSAs. They suggest that the uneven success of PSAs in the past does not necessarily mean that such messages should be abandoned, but rather that a search for alternative message strategies may be in order. They argue that one theoretical framework that could prove useful for PSA developers and salient to PSA viewers is the conceptualisation of college drinking as a ritual behaviour. They do not imply that such a theoretical framework is limited to college drinking; instead, they offer an example of how the ritual framework can be applied to change behaviour. They state that if important ritual aspects of behaviour are incorporated correctly, PSAs may be more meaningful to the audience and hence more effective than previous efforts. Consumption of alcohol by college students has been described as ‘an inevitable rite of passage’ (Centre on Addiction and Substance Abuse, 1994).

Public service announcements compete for space with other forms of advertising on television and radio. Traditionally, PSAs for radio and television stations have been broadcast free, in part to satisfy US stations’ community service obligations. Lacking
funds to mount large media campaigns, the public health community has depended on the willingness of editors and producers to present PSAs. With increased competition for spots, some US stations are airing as few as 10% of the PSAs they receive (Public Health Reports, 1993). The US alcohol industry has initiated several campaigns promoting responsible drinking, including Miller's "think when you drink" and "drive safely" campaigns. Coor's "now, not now" advertisements, and Anheuser-Busch's "know when to say when" campaign—a $15 million effort but only a small part of its $450 million advertising budget (Rose, 1991). Critics believe such advertisements have led to an increased awareness of alcohol issues but have done little to change behaviour (Jacobs, 1989). DeJong et al., (1992) note other criticisms of moderation advertisements. Specifically, they argue that although the advertisements presumably promote responsible drinking, they actually increase the legitimacy of beer consumption in a variety of social situations by using some of the same images found in the brand advertising—playful teasing between a young man and woman at the beach, male bonding around a campfire, and bars crowded with sexually attractive women—all of which tend to undermine whatever moderation message they may provide.

The use of fear appeals is perhaps the most common tactic for PSAs, with threats of physical harm including injury and death used more frequently than social threats (Reid and King, 1986). One problem associated with the use of fear appeals aimed at college students is that the target audience underestimates or minimises the risk associated with drinking. The Institute of Health Policy (1993) reported that 18 to 25 year olds are the least likely of any age group to believe that heavy alcohol use is risky. Further, students who consume larger quantities of alcohol perceive consumption to be significantly less risky than those who consume smaller quantities (Patterson et al., 1992).

Hoek (2004), states that social marketers have learned how to communicate with youth and influence their attitudes by studying the tobacco industry's promotions. The use of strong imagery, youth role models and group dynamics that once seemed the exclusive domain of tobacco manufacturers has been reclaimed by social marketers and reoriented to promote health behaviours. Smoke-free campaigns thus feature images of
independence, loyalty and physical attractiveness that formerly enhanced tobacco brands. Montazeri and McEwen (1997) state that effective anti-drug communication requires: (1) reality, (2) clear-cut message, (3) simplicity, and (4) thought-provoking nature and impact of message. A study released by RoperASW (2003), (a leading global marketing research and consulting firm) shows teens who see or hear anti-drug advertisements at least once a day have significantly stronger anti-drug attitudes and are up to 38% less likely to use drugs. According to Ed Keller, CEO of RoperASW, “with a relationship this strong, it is evident that working to boost the number of teens who see or hear anti-drug messages on a daily basis can help drive down drug use”. The study’s data were drawn from a national study of 7,084 teens across the US.

So can the same approach be adopted for the alcohol industry? Warnings that portray products as “forbidden fruit” may make them attractive to young people (Parker-Pope, 1997). Snyder and Blood (1992) found that alcohol warnings had a reverse effect on young adults causing them to perceive more benefits than risks from alcohol consumption. Krugman et al., (1994) found that although many adolescents may be aware of the presence of a mandated warning, they usually do not remember the general concept or message. When it comes to cigarette warnings, Fischer et al., (1993) found that new warnings containing simple, straightforward messages, with larger type and graphic devices, were more effective in communicating the dangers of smoking to adolescents. Young people have difficulty relating to negative consequences that may occur in the distant future. Consequently, care must be taken to create a warning message that is meaningful (Long, 2005).

Public service announcements must compete with a series of different factors, including advertising and entertainment programming for the public’s attention. For campaigns against alcohol abuse, the challenge is especially great. Beer and wine advertising accounts for one of the largest categories of television and radio advertising, and promotion of these products is intricately entwined with cultural events such as sports and rock music concerts (Novelli, 1990). In such an environment, campaigners attempting to prevent or reduce alcohol consumption among young people face a steep
uphill battle. It is important to understand how and why certain types of messages in PSAs, may be likely to influence young people's attitudes toward drinking while others do not (Long, 2005). DeJong and Winsten (1990) state that messages directed at pre-teens and adolescents should capitalise on important themes in the development of adolescent identity, including freedom, autonomy, and peer group acceptance.

The effectiveness of public service announcements may be hindered by their inability to counter advertising. Studies have also found that targeted audiences tend to find PSAs boring (Grube, 1993) and, worse, that PSAs either fail to catch their intended audience's attention or are not remembered by their audiences (Grube, 1993; Grube and Wallack, 1994). Indeed, although high school students in one study rated anti-alcohol PSAs higher on elements such as realism, less reliance on stereotyping, and overall effectiveness; beer advertising nevertheless held the most sway over the students' decision-making beliefs (Pinkleton et al., 1999). Overall, the students rated alcohol advertisements more positively on affectively based criteria (enjoyment and visual appeal) and rated PSAs more positively on logic-based criteria (realism and honesty). These are the basic differences in the goals of commercial advertising and public health campaigns. Commercial advertising seldom is designed to bring about new attitudes or patterns of behaviour; rather, it intends to give direction to already existing preferences. In contrast, public health campaigns seek fundamental changes in health-related behaviour, with the benefits of such changes often being delayed and intangible (Long, 2005).

Research indicates that a variety of affective message characteristics can influence the effectiveness of persuasive messages in public service announcements (Andsager et al., 2001). To be successful, PSAs should portray models and target behaviours as being desirable, stressing the benefits of the target behaviour (Austin and Johnson, 1997a; 1997b; Hafsted et al., 1996; Monohan, 1995). They should elicit positive affective reactions, although negative messages can be more memorable and have a stronger impact on judgements than positive or neutral messages (Hamilton and Zanna, 1972; Pinkleton, 1996). They should incorporate both rational and emotional appeals (Flora and Maibach, 1990). They should integrate information, social norms marketing, and
advocacy approaches to create a climate of support for institutional, community and policy changes that will alter the environment in which students make decisions about their alcohol consumption (DeJong, 1992).

This section has detailed the use of Public Service Announcements and how they can be used to change behaviour. We will now examine the use of fear and threat appeals in public service announcements

### 3.4 Use of Fear and Threat Appeals in Public Service Announcements

The term “threat appeal” was coined by McGuire (1985), who concluded that the severity of a threat appeal determined the persuasiveness of the advert. While slightly different fear appeal definitions appear throughout related literature, the description by Spence and Moinpour (1972) seems to adequately sum up their role.

*Communications using fear appeals are designed to stimulate anxiety in an audience with the expectation that the audience will attempt to reduce this anxiety by adopting, continuing, discontinuing, or avoiding a specified course of thought or action.*

Nunnally and Bobren (1959), as cited by Rotfeld (1988), made a distinction between high and low threat appeals to aid the classification of adverts. The authors concluded that an advert has a “relatively high anxiety if it pictures people in physical danger, pain, fear and embarrassment...it is said to have relatively low anxiety if it does not picture people in physical danger, pain, fear and embarrassment”.

LaTour and Zahra (1989) state that fear appeals essentially follow a three step process. Step one sees the advert trying to frighten the viewer thereby increasing vulnerability and suggestibility. The second step of a fear appeal sees the advert attempting to convince the viewer that the threat involved is real and necessitates action. Finally, the third step of a fear appeal involves providing a risk reduction strategy or recommendation to neutralise the threat. Research by Leventhal et al., (1965) and Job (1988) indicates that
adverts which specified a particular set of instructions to reduce a threat boasted higher behaviour change rates than those adverts which offered only generic advice. Witte and Allen (2000) also suggested that providing specific information on recommended actions, helps maximise behaviour change and minimise defensive or avoidance behaviours. Avery (1973) found that adverts must draw clear conclusions for the audience in order for them to be effective.

Some research suggests that individuals will moderate their behaviour to achieve an optimal level of fear (Zuckerman, 1983; Zuckerman, 1979). Rotfeld (1988) stated that threat appeals are too general and asserts that no fear appeal will evoke the same response even within a narrowly defined group of people. Most experts have concluded that fear campaigns are extremely difficult to execute, rarely succeed and should only be used under limited circumstances (Job, 1988). Indeed, some argue that there is a real risk that fear appeals will backfire, making the problem behaviour even more resistant to change (DeJong and Winsten, 1998). Different people fear different things. The challenge therefore lies in identifying the threat that is most effective given the large range of possible responses from different people. The personal relevance of the threat needs to be high to instigate attitude change (Rotfeld, 1999).

A variety of studies have found that the more pronounced the fear evoked by an advert, the bigger the persuasive effect yielded (Sutton, 1992; Rotfeld, 1988; Boster and Mongeau, 1984; Sutton, 1982). The results of analysis conducted by Sutton (1982) found that “increases in fear are consistently (have a very high probability of being) associated with increases in acceptance of the recommended action” (Sutton, 1982, p517). The research concluded that there was a generally discernable linear relationship between the level of fear arousal and the level of message acceptance. The inclusion of a recommended action in a high threat advert was found to help reduce the perceived threat while facilitating behaviour change (Sutton, 1982).

Goldstein (1959) identified different personality types which moderated the impact of a threat appeal on an individual. Those identified as “copers” were well equipped to
process both high threat and low threat appeals. However, "avoiders" were found to be less well equipped to deal with high threat appeals and were therefore more suited to low threat appeals. Research by Thayer (1967) suggests that if the level of threat in a fear appeal remained below a person's arousal threshold, then the viewer was likely to be responsive to the advert. However, when the level of threat in a fear appeal exceeded the viewer's threshold, the person was unable to rationally adapt to the threat due to the excess tension created.

A study by Job (1988), found that participants reported high threat advertising to be highly motivating and therefore effective. Earlier research by Haefner (1956) has indicated that high threat fear appeals are more effective in stimulating longer term attitude change than low threat communications. Conversely, some research suggests that strong fear appeals often produce only transitory changes in attitude. Capon and Hulbert (1973) and Gillig and Greenwald (1974) found there was no difference in the persuasion effect of high and low threat advertising when the post study attitude test was postponed for a later date. Their research indicated that high threat appeals often boast more immediate persuasive effects than low threat appeals. However, they observed that quite often the initially large attitude change produced by high threat adverts was more quickly eroded than the more modest attitude change produced by low threat adverts. The research suggested that perhaps there is an inverse relationship between the initial aptitude of the attitude change and the longevity of these changes.

Tay (2002) found that high threat appeals are the most effective fear appeals in inducing adaptive behaviour change among audience members who initially had not perceived the problem behaviour as being related to them. Similarly, Ray and Wilkie (1970) found strong fear appeals were very persuasive among individuals with low anxiety levels and among those who found the topic to be of low personal relevance. Rotfeld (1988) suggests that strong fear appeals are more effective if they address a topic that is perceived as relevant to the audience.
3.5 Effects of Fear Appeals: Physical versus Social Threat

Fear is a negative emotion and is associated with a high level of arousal. It is caused by a threat that is perceived to be substantial and personally relevant to individuals (Ortony and Turner, 1990; Easterling and Leventhal, 1989). Fear appeals have been used in alcohol communications, both socially and physically in the past. The use of fear as a motivation in advertising places emphasis on the severity of the threat. The use of fear appeals is grounded in the belief that some form of arousal is necessary for individual behaviour change to occur (Cohen, 1957; Rosenberg, 1956). Research on the effects of health messages has examined various aspects of fear messages including levels of fear (Janis and Feshbach, 1953; Janis and Leventhal, 1968), individual differences, social context and emotions (Tanner et al., 1991). Health messages that contain physical threat can be perceived and processed differently than messages featuring social threat. Further, the content can also be categorised as long term threat versus short term threat which may also lead to different cognitive and emotional processing (Shin et al., 2007). Even though many health messages use a fear appeal, they may vary a great deal in terms of content, pacing, camera movement, narrative style, emotional tone and others, each of which may have a different impact on the individual’s cognitive and emotional processing of the message (Shin et al., 2007). Of the health issues that have utilised threat appeals, road safety is particularly renowned for its use of physical threats in which drivers and passengers are injured and killed as a result of unsafe and/or illegal behaviour (Donovan and Henley, 2003; Elder et al., 2004). Typically, these advertisements, in a graphically explicit manner, portray the crash scene and victims.

Negative media messages such as fear appeals attract the viewers’ attention automatically and elicit orienting responses. Hence, these messages are likely to receive greater automatic attention (Shin et al., 2007). Most fear appeal messages contain a physical threat to warn the target about the harmful consequences of risky behaviours (e.g. physical pain, death, etc), while little research has looked at social threats used in health messages (Smith and Stutts, 2003). According to Tanner et al., (1991), social implications of a message may be more important to younger generations and hence may
play a bigger role in their attitude and behaviour change. Likewise, Holbrook and Batra (1987) also state that emotional responses to an advertising message may influence younger generations to a greater extent than they influence older generations. Emotional reactions to advertising are particularly relevant to adolescents because they live their lives on a more emotional level than older adults. Social threat messages contain a message that doing certain behaviours will result in socially undesirable consequences (e.g. being rejected by friends). Schoenbachler and Whittler (1996) point out that social threat messages are used extensively in advertising (e.g. for deodorant, dandruff shampoo, breath mints) and sometimes in an anti-drug PSA context. In their study, Schoenbachler and Whittler (1996) found anti-drug PSAs using social threats were more persuasive than physical threat messages.

Fear messages, in general, elicit negative emotions such as fear as the term indicates. As physical threat PSA messages contain more elements (e.g. getting sick or hurt, death, etc) that contain negative emotions, it is likely that individuals exhibit greater negative feelings and greater arousal responses to physical threat PSAs, compared to social threat PSAs (Shin et al., 2007). In their study, Smith and Stutts (2003) examined gender difference when college students processed long-term health appeal messages versus short-term health messages. Long-term health fear appeals discuss the dangers of smoking in terms of getting cancer or other long-term health problems. These messages are likely to use physical threat appeals, as their main message is to warn the target audience about the harmful consequences of certain risky behaviours that do not come in the immediate future. Short-term cosmetic fear appeals, however, feature negative social consequences of smoking (e.g. bad breath, smelly hair, yellow teeth, etc) which can be immediate. Smith and Stutts (2003) suggest that short-term cosmetic fear appeals work better for youth groups such as adolescents than long-term appeals because these individuals possess an attitude of immortality or disregard to physical risks. However, Smith and Stutts (2003) found that the results differed by gender. They found that long-term appeals are more effective for females but short-term appeals are more effective for males in terms of the change in smoking behaviour.
A study by Shin et al. (2007) hypothesised that even though social threat messages are perceived as more relevant and have greater persuasive power than physical threat messages, physical threat messages would have advantages of being processed better as they carry more intense emotions. This results in automatic allocation of cognitive resources via orienting responses. The results of their study concluded that physical threat messages receive greater attention than social threat messages, but that female college students tend to be greater influenced by physical threat than social threat while males are influenced by social threat more than physical threat. They stressed in their study that females are perceived to be more emotional than males and prefer emotional appeals more than males do.

This section has detailed how fear can be used in both physical and social threat appeals and the impact it can have on viewers of public service announcements. We will now examine what level of fear is necessary to induce a person to take note of these appeals and consequently change their behaviour.

### 3.6 Coping Responses to Fear and Threat Appeals

Stuteville (1970) discussed the psychological harm and detrimental effects of fear appeals on audience members. The psychodynamics of maladaptive responses are explored by Stuteville (1970), who identified three common defence mechanisms to fear appeals. Individuals seeking to reduce the stress associated with strong fear appeals often try to deny or ease the threat. Another technique used to reduce viewer stress is often achieved on a subconscious level. The “I am the exception to the rule” mentality permits the person invincibility because they convince themselves that they are somehow exempt or impervious to the threat. The third and final mechanism cited, is the act of symbolically reducing the threat in stature. This may mean laughing or demeaning the nature of the threat in order to reduce the stress it would otherwise cause.

Tanner et al., (1991) found that an individual’s past experiences and behaviours influenced their coping strategies. According to the authors, this occurs because people often store up “coping response repertoires” from prior experiences and behaviours that
have proved successful in the past. The research concluded these stored coping responses were more important in determining how someone responded to a fear appeal than the level of threat used in the advert. Ray and Wilkie (1970) stated that strong fear appeals were most persuasive among individuals who were found to possess strong coping behaviours and high self-esteem.

Research by Rogus et al., (1990) found that high sensation seekers prefer adverts that leave them "hanging" at the end of the advert. Conversely, low sensation seekers were found to favour adverts that provided a definite ending with a sense of closure. Research into anti-drug PSAs discovered that both high and low sensation seekers preferred PSAs that had a motivation element in the message at the beginning of the advert (Donohew, 1988). However, the groups differed in that high sensation seekers were more persuaded by high threat adverts while low sensation seekers were more persuaded by low threat adverts.

One theory of social marketing is the health belief model (HBM). The HBM states that the perception of a personal health behaviour threat is itself influenced by at least three factors: general health values, which include interest and concern about health; specific health beliefs about vulnerability to a particular health threat; and beliefs about the consequences of the health problem. Once an individual perceives a threat to his/her health and is simultaneously cued to action, then that individual is most likely to undertake the recommended preventive health action (Kotler and Lee, 2008). The core components of the HBM are as follows:

- *Perceived susceptibility*: the subjective perception of risk of developing a particular health condition.
- *Perceived severity*: feelings about the seriousness of the consequences of developing a specific health problem.
- *Perceived benefits*: beliefs about the effectiveness of various actions that might reduce susceptibility and severity (the latter two taken together are labelled "threat").
• **Perceived barriers**: potential negative aspects of taking specific actions.
• **Cues to action**: bodily or environmental events that trigger action.

A mid-1980s review of the research by Janz and Becker (1984), conducted across numerous health and screening behaviours found not only substantial support for the model but also that the perceived barriers component was the strongest predictor across studies and behaviours. For social marketing research and practice, the HBM becomes a salient theoretical model when addressing issues for at-risk populations who might not perceive themselves as such, in this instance students and alcohol abuse. Issues of fear or anxiety arousing messages often take place within the context of increasing perceived threat. The model provides insights about the psychological processes people experience when exposed to physical and social threat messages in an anti-drug context.

So as can be seen, an individual's past experiences and behaviours both influence their coping strategies and the content of a fear appeal can influence a change in their behaviour. The health belief model identifies that once an individual identifies a threat to his/her health, then she is potentially likely to respond to this threat by undertaking a recommended preventive action. This could be undertaken after viewing a PSA.

### 3.7 Message Framing for Binge Drinking

The lack of change in binge drinking rates may be due to the focus on the dichotomous category of binge versus non-binge, as opposed to the interaction of duration and quantity of alcohol consumed or specific positive and negative consequences (Alexander and Bowen, 2004). Not every binge drinker is engaging in negative behaviour, as suggested by Nezlek et al., (1994); Wechsler et al., (1998) and Wechsler et al., (2000c). Assessment of different styles of drinking and related outcomes could provide information about differences between problem drinking and drinking that increases social interactions (Wechsler et al., 2000d). Positive outcomes may be more important than negative, yet only one study was found that examined positive outcomes. Nezlek et al., (1994) recruited 90 college upperclassmen to participate in a social interaction.
Results indicated that men who binged one or two times a week and women once a week, reported more intimate interactions; deeper and broader self-disclosure; and more responsiveness from their partners than non-bingers.

Perhaps it is the definition of excessive use or binge drinking that hinders prevention efforts (Wechsler and Isaacs, 1992). The term binge may encapsulate such a broad array of drinking behaviours and outcomes that students fail to identify specific behaviours to change. As predicted by Alexander and Bowen (2004), different types of nights were distinguishable by the number of drinks consumed, time spent in the drinking environment, final approximate blood alcohol levels, frequency of engaging in each of the three types of drinking occasions (light, typical and heavy), and the associated outcomes.

Heavy drinking is thought to be a problem of expectations of fun (Wood et al., 2001). In a study by Alexander and Bowen (2004), the positive outcomes across the three types of drinking occasion (light, typical and heavy) were significantly different but small. Emphasising negative outcomes may have minimal utility because they are frequently delayed. Positive experiences are more immediate and may provide an avenue for prevention programming. Students in the study reported having as much fun on light as heavy drinking occasions. Interventions that focus on increased awareness of positive outcomes may improve expectations for light drinking. Nezlek et al., (1994) suggest that occasional excessive drinking might enhance college students' social lives. Heavy drinking nights are generally longer than typical or light nights. Students may increase consumption if they attribute fun experiences to the number of drinks rather than the increased time spent in the social setting. An intermittent reinforcement schedule of positive experiences may outweigh any negatives that occur as a result of heavy drinking. Nezlek et al., (1994) state that on these heavy drinking occasions, the assumed "social lubricating" effects of higher blood alcohol content (BAC) may outweigh the negative outcomes incurred during drinking episodes and overshadow the duration effect. Emphasising that people experience more fun when they increase the time spent in a social situation rather than increase the amount of alcohol consumed, educators can
provide alternative reasons for students as to why they experience positive outcomes, rather than focusing only on drinking behaviours.

Several researchers have examined the relationship between college student substance use and attitudes and expectancies regarding substance-free activities. For example, college students who hold positive expectancies for activities such as studying (Levy and Earleywine, 2004) and substance-free social/recreational opportunities (Turrisi, 1999) drink less frequently. Reinforcement surveys measure the frequency and subjective pleasure of potentially reinforcing events and activities; reinforcement is generally defined as the product of activity participation and pleasure ratings (Correia et al., 2002). These studies suggest that the frequency, quantity, and negative consequences of alcohol use are negatively related to overall levels of reinforcement derived from substance-free activities (Correia et al., 2002). They also suggest that heavy drinking is associated with lower levels of reinforcement from substance-free, non-social, passive-outdoor, and introverted activities (Correia et al., 2003). Correia et al., (2003) also suggest that experimentally manipulated increases in substance-free activities (in particular exercise and creative activities) can lead to decreases in alcohol use (Correia et al., 2005) and that students who reduced their drinking following a Brief Motivational Intervention (BMI), reported increased substance-free reinforcement from academic activities but also reported decreased substance-free social reinforcement (Murphy et al., 2005).

3.8 Harm Reduction

The International Harm Reduction Association (IHRA) (2003) defines harm reduction as:

*Policies and programs which attempt primarily to reduce the adverse health, social and economic consequences of mood altering substances to individuals drug users, their families and their communities. Pg 12*

The moral and disease models of alcoholism have dominated the prevention and treatment of alcohol problems since the early 1930s (Jellinek, 1960). According to these models, abstinence is considered the only alternative to excessive drinking and
individuals who drink to excess are viewed as either immoral or diseased. The prevention of excessive drinking within this framework advocates for a zero-tolerance, or "just say no", approach to alcohol. Conversely, harm reduction offers a pragmatic approach to alcohol consumption and alcohol-related problems based on three core objectives: (1) to reduce harmful consequences associated with alcohol use; (2) to provide an alternative to zero-tolerance approaches by incorporating drinking goals (abstinence or moderation) that are compatible with the needs of the individual; and (3) to promote access to services by offering low-threshold alternatives to traditional alcohol prevention and treatment (Marlatt and Witkiewitz, 2002). It is worth remembering that the concept of "harm reduction" covers a range of possible interventions, the common feature of which is merely that they do not aim at total abstinence (IHRA, 2003).

In a harm reduction model, abstinence is conceptualised as the "ultimate risk-reduction goal" (Marlatt et al., 1995). However, the main principle of a harm reduction approach is a pragmatic and compassionate view that some use of alcohol is a common feature of human experience and that the amelioration of use may be a more realistic option than insistence on abstinence (Riley et al., 1999). There is also evidence to suggest that low risk, moderate drinking is achievable for excessive drinkers (Sobell et al., 2000), and may be associated with lower levels of disease risk compared to abstinence and heavy use (Marlatt et al., 1995).

Zero-tolerance, the requirement of absolute abstinence promoted by traditional programmes, may hinder individuals who want to reduce the risks associated with heavy drinking, but do not want to quit drinking completely. Barriers to treatment seeking may also include fears of being stigmatised or labelled, denial of problem severity, negative beliefs about treatment programs and issues with privacy (Sobell et al., 2000). Acknowledging that most adolescents and young adults will drink, and supporting less harmful drinking behaviour may be a means for providing education and prevention without provoking rebellious attitudes and behaviour (Mosher, 1999). Harm reduction is no longer a minority movement and may soon be accepted as mainstream practice in the research and treatment of addictive behaviours (El-Guebaly, 2005).
Paglia and Room (1998) also state that a large proportion of adolescents and young adults try alcohol or illicit drugs without becoming frequent or problem users. A developmental perspective illustrates that alcohol and other drug experimentation or use is normative in the teenage years, and use will likely decline in one’s mid-to-late 20s (Chen and Kandel, 1995; Kandel and Logan, 1984). This “maturing out” process usually coincides with the adoption of adult roles and responsibilities (Bachman et al., 1997). Furthermore, the majority of late adolescents consume alcohol in Western societies, implying that drinking is not only a socially acceptable behaviour among adolescents but also normative. Therefore, health education that aims to discourage adolescents from drinking will have limited effects. In particular, insights into the positive aspects of drinking emphasise that prevention focusing on the negative effects of alcohol and neglecting some beneficial functions are not convincing for the target group (Lippincott et al., 2003).

Individuals that may benefit the most from a harm reduction approach to alcohol use are late adolescents and young adults (Marlatt and Witkiewitz, 2002). As can be seen from the evidence provided in chapter two, it is this generation who are either deemed heavy episodic drinkers or binge drinkers. Learning about how to drink more safely rather than enforcing abstinence is consistent with findings that most adolescents see drinking as normative (Baker, 2000; Blackman, 1996). It is a popular belief that preventive efforts are more likely to fail with regards to alcohol use, given its normative nature in later adolescence and young adulthood (Paglia and Room, 1998). In the case of alcohol reduction initiatives aimed at high-risk adolescents, Masterman and Kelly (2003), state that the social acceptance of drinking means that for young people, alcohol use can symbolise freedom, autonomy and attainment of adult status and that most teenagers engage in this process. They advocate harm reduction policies rather than abstinence-based prevention programmes on this basis, especially for at risk adolescents.

One therapeutic process that offers a useful way of engaging adolescents and is consistent with harm reduction philosophy is motivational interviewing (Miller, 1996). Motivational interviewing is a counselling approach that is client-centred and accepts that
clients who need to make changes in their lives approach counselling at different levels of readiness to change behaviour (Miller and Rollnick, 2002). Motivational interviewing would seem to be well suited to adolescents/students given that they commonly report strong attractions to drug use or indifference regarding alcohol use (Jessor, 1992; Zucker, 2000), and are sensitive and resistant to adult attempts to control or direct their behaviour (Marlatt et al., 1995). Motivational interviewing offers specific guidelines for resistance, and addressing ambivalence or indifference regarding substance use (Heather et al., 1996; Project MATCH Research Group, 1997; Project MATCH Research Group, 1998). Also, motivational interviewing is a client-centred approach, emphasising self-responsibility in decisions about changing or modifying drinking behaviours. Such an approach fits well with most adolescents’ strong need for autonomy and individuation.

Two programmes indicate that motivational interviewing is useful for late adolescents and/or young adults. Roberts et al., (2000) randomly assigned participants to either a motivational intervention, comprised of two sessions of 1 hour assessment and 1 hour feedback interview, or to a no treatment control group. At two year follow up, there were reductions in alcohol consumption and problems in the motivational intervention group compared to high-risk controls. At four year follow up, it was found that drinking patterns improved in both groups, but motivational interviewing participants reported additional reductions in alcohol problems. In 18-19 year olds presenting to hospital emergency departments, motivational interviewing showed reductions in alcohol-related harm at six months follow up relative to a standard care programme (Monti et al., 1999). Specifically, motivational interviewing recipients reported lower incidents of drinking and driving, alcohol-related injuries, and traffic violations.

Within the young adult age group, college students are at the highest risk for heavy drinking, binge drinking and alcohol-related consequences (National Institute of Alcohol Abuse and Alcoholism, 2002). Many college prevention and awareness programmes have specifically focused on providing information about the negative effects of alcohol and the benefits of abstention (Walters et al., 2000). These programmes rarely provide education about moderate drinking, nor do they provide the necessary cognitive and
behavioural skills for students to make educated decisions regarding their alcohol use (Marlatt and Witkiewitz, 2002). Marlatt and colleagues (Marlatt et al., 1995; Marlatt and Baer, 1997), randomly assigned a high-risk sample of adolescents who were entering college (average age of 19) to an intervention aimed to reduce the harm of heavy alcohol use and prevent the development of alcohol dependence. The intervention consisted of brief motivational interviewing, including feedback about how to reduce risk. Results at two-year follow-up indicated that those who received the intervention showed greater reductions in drinking over time compared to a high-risk control group. Further, the intervention group reported experiencing less alcohol-related problems. Other studies have also shown reductions in heavy drinking and/or alcohol-related problems among college/university students using similar interventions (Darkes and Golman, 1993; Kivlahan et al., 1990).

In a landmark report on college drinking prevention in the US, the National Advisory Council of the National Institute on Alcohol Abuse and Alcoholism (NIAAA) recommended specific interventions for college student drinking, indicating multiple studies demonstrating the efficacy of these approaches with college students (NIAAA, 2002). Firstly, the NIAAA recommended multi-component interventions combining motivational interviewing with cognitive behavioural skills training (Larimer and Marlatt, 1990; Marlatt and Gordon, 1985) and norms clarification (Perkins and Berkowitz, 1986). An example of this type of intervention is the Alcohol Skills Training Programme (ASTP) (Hernandez et al., 2006; Kivlahan et al., 1990). ASTP is a group of prevention programmes that teaches alcohol moderation skills, such as alternating alcoholic and non-alcoholic beverages, drinking slowly, setting a limit prior to the drinking occasion, using external cues (such as time and number of drinks consumed) in conjunction with a blood alcohol concentration (BAC) card to remain at or below a 0.5-0.6 BAC, and avoiding drinking in situations where it is physically hazardous (when driving, when taking medications, etc.). In addition, ASTP uses motivational interviewing strategies to elicit from students personally relevant reasons for reducing drinking and helps them weigh the pros and cons of drinking to excess as compared to drinking moderately or not at all. The programme provides accurate information about alcohol's effects, dispels common
misconceptions (e.g. about using coffee or cold showers to reduce BAC), and provides information about accurate norms for alcohol use on college campuses. This intervention has been shown to reduce alcohol use and related negative consequences when implemented in 8-session, 6-session, and 2-session groups, though effect sizes are largest in the 8-session format (Baer et al., 1992; Kivlahan et al., 1990; Miller et al., 2001).

The second type of intervention recommended by the NIAAA is to utilise brief motivational feedback for college drinking prevention. Brief Alcohol Screening and Intervention of College Students (BASICS) (Dimeff et al., 1999) is an example of such an initiative that has demonstrated good efficacy in college drinking prevention and, like ASTP, is explicitly based on harm reduction principles. BASICS incorporates much of the same content as ASTP, but is implemented one-on-one, guided by a personalised graphic feedback sheet presenting results of an assessment of the individual’s own drinking patterns, attitudes, beliefs about drinking and negative consequences of drinking. BASICS has been implemented both as an indicated prevention approach, based on the results of a brief screen for at risk drinking (Borsari and Carey, 2000; Marlatt et al., 1998), as well as a selective prevention approach implemented with at risk groups (e.g. fraternity members) regardless of individual drinking levels (Larimer et al., 2001). In both contexts, BASICS has demonstrated efficacy in reducing alcohol use, negative consequences, or both, in college campuses (Larimer et al., 2001; Marlatt et al., 1998; Murphy et al., 2001).

Thirdly, the NIAAA also recommended expectancy challenge interventions. These interventions involve a vivo (real life) drinking experience which actively demonstrates the role of expectations and placebo effects in determining alcohol’s effects. Specifically, students are administered with either alcohol or a placebo, asked to engage in a variety of social tasks, and subsequently asked to nominate who, including themselves, received real alcohol. Research indicates that students cannot determine on better than a chance basis who received alcohol and who did not (Darkes and Golman, 1993; 1998). This experience has been associated with a clearer understanding of the role of environment and expectations in producing many of the social effects of alcohol
and, in turn, a reduction in excessive alcohol consumption amongst group members (Darkes and Golman, 1993; 1998).

A number of the interventions described above have been peer delivered. Peer delivery is not in itself a harm reduction strategy, but is likely to facilitate a harm reduction perspective for a number of reasons. Meeting the clients on their level and taking the perspective of the drinker may be easier for peers to do. Talking with peers may reduce the potential stigma associated with seeking the help of a professional and thereby reduce barriers. In addition, all other things being equal, peer relationships are more likely to feel collaborative and less likely to be perceived as an authority figure providing direction to a subject. In both school and college settings, peer delivered intervention appears to be at least as effective, and in some cases more effective, in comparison to interventions delivered by teachers or professionals (Bolvin et al., 1990; Larimer et al., 2001).

3.9 Summary

This chapter has summarised the role that social marketing has in influencing behaviour change through the use of public service announcements. These PSAs use fear appeals to arouse the emotions of the viewer through the use of both physical and social threat appeals. It also demonstrates that a harm reduction approach as opposed to an abstinence approach to combat excessive alcohol consumption is feasible through the use of a number of interventions detailed in the chapter.
Chapter 4

Research Methodology
4.1 Introduction

This chapter introduces the research objectives of this study. It details the research design and the data collection methods used. Qualitative research methods were used for the purposes of this study using both focus groups and semi-structured interviews. Further, the data analysis procedures are explained as well as the presentation of the results and findings. Limitations of the research are also detailed at the end of the chapter.

4.2 Research Objectives

This research is of an investigative nature and sets out to analyse the application of social marketing in reducing binge drinking among female college students. It involves interviewing female college students in Cork.

Main Research Question:
What should social marketing messages contain in order to reduce the amount of binge drinking among female students in third level colleges?

Objectives:
1. What is the extent of binge drinking among the female college student population?
2. What are their motivations/beliefs/expectancies about binge drinking?
3. What are their coping strategies in relation to binge drinking?
4. Are social threat appeals more powerful than physical threat appeals in reducing binge drinking among female college students?

4.3 Research Design

A research design is a framework or blueprint for conducting a research project. It details the procedures needed to obtain the required information. Its purpose is to design a study
which will test the hypothesis of interest, determine possible solutions to the research problems and provide the information needed for decision making (Malhotra, 1996). Easterby-Smith et al., (1991) believed research design is more than the methods by which data are collected and analysed. It is the overall configuration of a piece of research: what kind of evidence is gathered, from where and how evidence is interpreted in order to provide good answers to the basic research question. A qualitative research design was chosen for this study, comprising five focus groups and two interviews.

Although there is never a single, perfect research design that is sufficient for all research projects, Emory and Cooper (1991) advised that good research should meet the following tests:

- The objective of the research should be clearly defined and sharply delineated in terms as unambiguous as possible.
- The research procedures used should be described in adequate detail, to enable another researcher repeat the research.
- The procedural design of the research should be devised with care to yield results that are as objective as possible.
- The researcher should report, with complete truthfulness, flaws in procedural design and eliminate their effect upon the research results.
- Analysis of the data should be adequate to reveal their significance and the analysis procedures used should be appropriate.
- Conclusions should be confined to those justified by the research data and limited to those for which the data provide a sufficient basis.

4.4 Data Collection

Data collection is the visible part of market research. There are various types and techniques of data collection with the most fundamental division being between desk (secondary) research and fieldwork (primary) research. Here, one comes across an important rule of marketing research – always exhaust secondary sources of data before planning to collect any primary data. Extensive secondary research was conducted on
journal articles, books and reports, before primary research commenced. CIT's extensive electronic library databases were accessed for relevant secondary data. This secondary research is contained in the literature review Chapters 2 to 6.

4.4.1 Qualitative Research

Qualitative research methods, as defined by Van Maanen (1983), are "an array of interpretative techniques which seek to describe, decode, translate and otherwise come to terms with the meaning, not frequency, of certain more or less naturally occurring phenomena in the social world". The term qualitative means an emphasis on processes and meanings that are not rigorously examined or measured (if measured at all), in terms of quantity, amount, frequency or intensity (Denzin and Lincoln, 1998). It draws on a wide variety of theoretical perspectives and practical techniques, including theories such as cultural studies, psychology and feminism and techniques such as interviewing, narrative analysis and focus groups (Seale et al., 2004).

Qualitative research is more flexible and fluid in its approach than quantitative statistical methods. The interpretative and flexible approach is necessary due to the focus of qualitative research on meaning and interpretation (Liamputtong Rice, 1996). According to Hammersly (1992), qualitative data are reliable because it provides information from the point of view of the people studied rather than presenting it from the perspective of the researcher. Qualitative methods are also often useful as an exploratory phase of research. McDonald and Daly (1992) assert that qualitative data analysis is particularly essential when the researchers have little knowledge about the area of investigation and 'where the social contexts of peoples' lives, is of critical significance'. Even though quantitative statistical data can be very useful in explaining public health issues, especially the cause and extent of disease, they may mask people's interpretations and understandings, and their interactions with others.

In contrast to quantitative research, qualitative research is intensive rather than extensive in its objectives (McCracken, 1988). In qualitative research, the investigator serves as a
kind of "instrument" in the collection and analysis of data (Guba and Lincoln, 1981). This metaphor has proven to be useful as it emphasises that the researcher cannot fulfil qualitative research objectives without using a broad range of his or her own experience, imagination and intellect in ways that are various and unpredictable (Miles, 1979).

4.4.2 Focus Groups

The use of focus groups in this research study on female binge drinking appears appropriate given the complexity of the cognitive and behavioural processes associated with this target group. Focus groups were chosen for the purposes of this research as it was felt by the researcher that they are the most effective method of data collection for exploring sensitive topics, issues such as the topic under consideration. Also due to time constraints, it was felt that focus groups would be the most efficient method for eliciting such personal data from participants and also due to the consideration that they allow the researcher to obtain a deeper understanding of the topic be discussed with participants.

Focus groups are small groups of people brought together and guided by a moderator through an unstructured, spontaneous discussion for the purpose of gaining information relevant to the research problem.

(Greenbaum, 1988)

The goal of a focus group is to draw out ideas, feelings, and experiences about a certain issue that would be obscured or stifled by more structured methods of data collection. Focus groups are an effective method of data collection in market research because they are good for exploring people's feelings, thoughts, and behaviours (Costigan Lederman, 1990). For the past three decades, focus groups have been increasingly used across such academic disciplines as sociology, psychology, media studies, education, and healthcare (Hesse-Biber and Leavy, 2006). Kitzinger (1994) explains that focus groups are particularly useful in gaining data from populations traditionally referred to as "difficult". These people may feel unsafe, disenfranchised, or otherwise reluctant to participate in
research. Examples of such groups include AIDS patients, welfare recipients, drug users, etc.

Focus groups are a profound experience for both the researcher and the research participants that generate a unique form of data (Greenbaum, 1988). They tell the qualitative researcher things about social life that would otherwise remain unknown (Hesse-Biber and Leavy, 2006). Morgan (1998) asserts that focus groups are fundamentally a way of listening to people and learning from them. Focus groups create lines of communication. Berg (1995) claims that focus groups are an attempt to learn about the biographies and life structures of group participants. Focus group interviews are either guided or unguided discussions addressing a particular topic of interest or relevance to the group and the researcher.

Stewart and Shamdasani (1990) claim that the focus group interview usually involves eight to twelve individuals who discuss a particular topic under the direction of a moderator. The latter promotes interaction and assures that the discussion remains on the topic of interest. A typical focus group session will last from one and a half to two and a half hours (Stewart and Shamdasani, 1990). Although the focus groups can be conducted in a variety of sites, from homes to offices, it is most common for focus group sessions to be held in facilities designed especially for focus group interviewing. It is important that a balance is struck between what is important to the members of the group and what is important for the researcher. Berg (1995) claims that the informal group discussion atmosphere of the focus group interview structure is intended to encourage subjects to speak freely and completely about behaviour, attitudes and opinions that they possess. Berg (1995) further states that when focus groups are administered properly, they are extremely dynamic, where interactions among and between group members stimulate discussions in which one group member reacts to comments made by another.

The researcher has a very particular and important role in focus group interviews. In the context of a focus group, the researcher assumes the role of moderator. The moderator greatly influences the flow of the conversation and thus the group dynamic (Hesse-Biber
and Leavy, 2006). The way in which a researcher chooses to moderate during data collection is intimately linked with decisions about standardisation. In a research project with high standardisation, it is more likely that the researcher will maintain a high level of control as moderator, whereas in more evolving designs, the researcher may opt for less control and a more open style of moderation (Morgan, 1998). It is intended for the purposes of this research to adopt a more open style of moderation. Low levels of moderation allow the research participants to do most of the talking, thus providing rich descriptions of social life and in-depth explanations of social processes. When the researcher does not stick to a rigid interview guide but rather allows the group to take hold of the narrative, the discussion may move in directions that the researcher could not have anticipated, while still remaining relevant to the research objectives.

Successful focus groups occur when their use is consistent with the purposes and aims of the research (Stewart and Shamdasani, 1990). However, there are at least four criteria by which success or good quality can be determined (Merton et al., 1990):

- **Range**: successful focus groups should cover a maximum range of relevant issues, not only providing important issues relevant to the research questions, but also revealing some unexpected or unanticipated issues.
- **Specificity**: focus groups should provide information that is as specific to the participants’ experiences and perspectives as possible.
- **Depth**: focus groups should foster interaction, which enhances the exploration of the participants’ perspectives in some depth.
- **Personal context**: focus groups need to take into account the personal context in the generation of participant responses.

Focus groups are invaluable in obtaining in-depth information within a short period of time. They are not an easy option, with some focus groups being complex and generating bulky amounts of data to be processed (Kitzinger, 1995). As mentioned, over the past couple of decades or so, focus groups have become popular and evidence points to them being a valuable method for qualitative data collection (Morgan, 1997).
Participants will share certain characteristics which make them suitable for the research problem being explored. These characteristics may be based on physical, behavioural or psychological factors. In this study, female college students studying in Cork between the ages of 18-24 years were the target profile. Consequently, only persons who fitted this description were permitted to participate in the focus groups. Due to the complexity of alcohol problems, exploratory focus groups were utilised for the purposes of this research. These focus groups are typically used to flesh out the issues involved when large information gaps are present.

Five focus groups were conducted between the 31st of March and the 29th of April 2009. The focus groups were held in the conference room of the library in Cork Institute of Technology. This location facilitated the use of a projector which was used to screen the advertisements that were shown to the students and it also was of an ideal size for the number of participants that were taking part. The focus groups were recorded using an audio tape to facilitate data collection and analysis. The semi-structured nature of the focus group is outlined in the interview schedule included in Appendix 1. Each session lasted about an hour and a half. The sample frame was female college students from Cork Institute of Technology and the students were picked using a convenience sample. A total number of 45 female students participated in the research. The focus groups were moderated by this researcher and a trained researcher. Consultations with an experienced female researcher prior to the conduct of the focus groups were held. This was to ensure that questions that dealt with the advertisements of a sexual nature were handled appropriately in the focus groups. All questions relating to these advertisements that dealt with the sexual assault issue were left to the end of the focus group as it was felt that rapport had been allowed to build up by then.

Participants were firstly briefed on the purpose and research objectives of the study. The anonymous nature of the process was stressed as it was believed that it was important to make participants feel at ease and encourage them to contribute their views and opinions without prejudice or judgement. Having introduced the topic, a 20-25 minute preliminary discussion was conducted in order to gather data on the level of drinking that currently
exists among the participants, the age of onset of drinking, why they started drinking, their knowledge of the health consequences of binge drinking, particularly on females, and their understanding of the term "binge drinking". This preliminary discussion also helped in establishing a rapport between the moderator and the participants. Having completed this discussion, participants were then shown eleven television fear advertisements relating to social and physical consequences of binge drinking. These advertisements were sourced from Ireland, the UK, the US and Australia. All advertisements, except one, were aimed at a female audience.

The participants were firstly shown the six physical fear advertisements that had been chosen. The first four of these fear advertisements dealt with the issue of physical assault and rape and were produced in the US and Australia. Advertisement 1 was sponsored by the Queensland Government and depicts a typical night out for a young woman. She was in a night-club with her friends, dancing, chatting and drinking alcohol and having a good time. As the advertisement progresses she is getting very drunk and at the end of the advertisement she ends up getting sexually assaulted. A voiceover throughout the advertisement says "excessive drinking leads to your chances of being abused, injured or assaulted. Don't go too far...every drink counts".

Advertisement 2 begins by showing a young boyfriend and girlfriend arriving at a house party. They are offered shots and at first the girl refuses but is persuaded to take one after her boyfriend decides to take one. She then starts to drink more and the advertisement then jumps to a bedroom where she and her boyfriend are kissing on a bed. The boyfriend has to get up to vomit and leaves the girl alone in the bed. A group of young men who were at the party see that the girl is on her own and enter the bedroom and close the door behind them. A caption then states "Binge Drinking can have consequences....are you ready for yours?"

Advertisement 3 was an advert developed by the Harvard School of Public Health. It gives the viewers facts and figures in relation to the link between alcohol and rape. It then shows a female victim of rape who is inconsolable. A caption appears at the end,
"Take Control……stay away from Binge Drinking". It must be stated also that the music in this advert was very appropriate for the issue that was being dealt with.

Advertisement 4 shows a woman called Lisa who is out drinking with what appears to be work colleagues after a day in the office. She is very quiet initially but when she starts to consume more alcohol, she begins to chat more freely and really seems to be enjoying herself. All her colleagues appear to go home and she is left on her own in the bar dancing with a stranger. She leaves the bar with this stranger and he is holding her up as they leave. The advert then blanks and the woman starts screaming with the following caption appearing, "It’s not the drinking…..its how we’re drinking”.

After viewing these four advertisements, reactions were sought and views depicted in them discussed.

The next two advertisements dealt with the physical fear effects of alcohol consumption. Advertisement 5 was taken from the UK and is a real life situation. It shows a woman who is lying on the ground in public, being assisted by the West Yorkshire police. They have called for assistance from the health service as the woman is too intoxicated to stand or even communicate with the police. When the ambulance arrives the woman has to be assisted to the ambulance by two paramedics. The caption at the end of the advert states “Enjoy yourself this Christmas…BUT….Know Your Limits”.

Advertisement 6 is an Australian advert and deals with the view that alcohol makes a person feel invincible. When a girl lets go of her balloon, a young man takes it upon himself to retrieve it for the girl. The young man is then portrayed as an action hero who climbs scaffolding erected against a building. As the action hero reaches the top of the scaffolding and is just about to reach out for the balloon, he slips and falls. The body of the young man falls to the ground and he is killed instantly upon impact. A voice over then states - “Too much alcohol makes you feel invincible when you’re most vulnerable".
Again, after viewing these two advertisements, reactions and views were discussed among the group. A discussion was then held on which advertisements they felt were the most effective and why.

The remaining advertisements then dealt with social fears such as vomiting, falling over, loss of control, etc. Two advertisements produced in the UK were shown first as they both attempted to get the same message across. Advertisement 7 showed a young woman who appeared to be getting ready for a night out. The advert shows the young woman tearing her tights, breaking the heel off her shoe, vomiting in her bathroom, pouring wine over her top and then heading out the door as if nothing has happened. The caption for the ad is “You wouldn’t start a night like this, so why end it that way”.

Advertisement 8 uses a catwalk setting which is surrounded by observers. The first female model walks out confidently onto the catwalk, stops in the middle of the catwalk, vomits, and then walks off as if nothing has happened. The second female model walks onto the catwalk, again very confidently, stops in the middle of the catwalk and begins to urinate in front of everybody. She then turns around and walks off. Finally, a male model struts onto the catwalk, does his modelling and as he is just about to leave the catwalk he purposefully bumps into another male model who is passing him, knocks him to the floor and then kicks him in the head. The observers gasp in horror at this. The model just turns and walks off with no apparent concern for what he has done. Again the caption appears, “You wouldn’t start a night like this, so why end it that way”.

After watching both these advertisements, reactions and views were gauged from the participants.

The next advertisement was produced in Ireland by drinkaware.ie. In this advert, a young woman is giving details about how she and her friends go out every weekend and have a good time. She tells how they always look out for each other. It shows the same young woman getting sick in a bathroom in a pub while her two friends look on in disgust. It then jumps to the end of the night when her two friends are trying to hail a taxi while the
same young woman is slumped on the ground from too much alcohol. When her friends
manage to get a taxi, they then attempt to pick her off the ground and put her into the
taxi. The advert ends with the tagline - "Know the one that's one too many". As this was
the only Irish advert shown to the group, participants were asked for their views, as the
majority of the group would have seen this advert before.

Advertisement 10 was entitled Trish's Hen Do. It deals with a double scenario situation.
In the first scenario, a group of women arrive at a friend's hen party. They have a couple
of drinks and enjoy themselves. One woman wakes up the next morning and a tagline
appears - "A night to remember?" The second scenario again shows all the friends
arriving at the hen party, but this time the woman drinks a lot of alcohol and is vomiting
in a bathroom and dancing on a table, much to the embarrassment of her friends. Again it
shows the woman asleep the next morning and again the tagline - "A night to forget?"
appears. At the very end of the advert, a tagline appears - "The choice is yours". The
purpose of the advert is to display that when the woman drank in a responsible manner in
the first scenario, she had a good time and can remember her night whereas with the
second scenario she drank to excess, embarrassed herself and her friends and cannot
remember any of it. Again, participants were asked for their views on this type of
advertisement as it was felt that they would not have seen an advert depicted in this way
before.

Finally, advertisement 11 shows a scene from a house party where there is a lot of
alcohol being consumed by both males and females but then jumps forward to the next
morning when everyone is passed out. Again the emphasis of this advert is that this is the
consequence of excessive alcohol consumption.

A general discussion was then held on all the social advertisements shown and their
effectiveness.
4.4.3 Interviews

As well as using focus groups to obtain data on the topic under consideration, semi-structured interviews were also conducted. For the purposes of eliciting extensive data from two leading public health experts, these interviews were felt to be one of the most appropriate research methods.

Qualitative interviews can be used to yield exploratory, descriptive and explanatory data that may or may not generate theory. Likewise, they can be used as a stand-alone method or in conjunction with a range of other methods such as surveys and focus groups (Hesse-Biber and Leavy, 2006). Bingham and Moore (2005) use the term ‘conversation with a purpose’ for the qualitative interview where researcher and informant become ‘conversational partners’. Primarily, they aim to elicit information by delving into the past and present experiences of participants in order to discover their feelings, perceptions and thoughts on a particular topic. In qualitative data collection, interviewees’ responses to one’s initial questions determine how the interview develops.

For the purposes of this research, semi-structured interviews were chosen as the method by which the interviews would be completed. In semi-structured interviews, the researcher will have a list of themes and questions to be covered although these may vary from interview to interview. The order of the questions may also be varied depending on the flow of the conversation. Additional questions may be required to explore the research question and objectives. The nature of the questions and the ensuing discussion mean that data will be recorded by note taking and/or by tape recording the conversation (Saunders et al., 2000). This semi-structured approach was taken in this research, as the researcher felt that by allowing the interviewee more freedom to talk on the topic of interest, that the information gathered would be more beneficial than asking predetermined questions.

Two interviews were conducted for the purposes of this research in April and May 2009. The interviews were held with two leading public health experts in Ireland, in the area of
alcohol. These were Professor Joseph Barry from Trinity College Dublin and Professor Patrick Wall from University College Dublin. Both individuals were chosen on the basis that they had extensive knowledge of the health effects that binge drinking was causing on the Irish public and also on the basis that their own personal opinions and views would be very insightful in gaining an overall view of how serious the public health community viewed binge drinking, especially amongst females. The format of the interviews can be seen in Appendix 2.

4.5 Analysis of Data

Data analysis in qualitative research consists of preparing and organising the data for analysis, then reducing the data into themes through a process of coding and condensing the codes, and finally representing the data in figures, tables, or a discussion (Cresswell, 2007). Once all the primary data has been collected, it has to be then translated into information to satisfy the objectives of the study. Once all focus groups and interviews were completed, the researcher set about transcribing all the data collected and then set about analysing this data. Prior to any detailed analysis, the data collection instruments and procedures were checked for completeness and accuracy. This is data preparation and includes the function of editing and coding the data. The data was analysed for relevant themes.

4.6 Presentation of Results and Findings

The final and remaining stage of any marketing research process is to communicate the findings and information to solve the problem/opportunity. This generally involves the researcher preparing and presenting a written report to the client, in this case Cork Institute of Technology. The aim of this chapter has been to explain the procedures and methodologies adopted to achieve the objective of the thesis, which involves investigating the application of social marketing in reducing binge drinking among female college students. The final chapters of this thesis will present the results of this research, as well as a discussion of the main themes. The standard technique used to
present the qualitative data gathered in the focus groups and interviews is the use of
direct quotes from participants. This presentation style has been used in this study.

4.7 Limitations of Research

- Focus group participants only viewed the advertisements once. Therefore their
  reactions must be viewed within this context. Under normal circumstances,
  participants would be repeatedly exposed to these advertisements, thereby
  facilitating greater persuasion effects.

- It should be noted that the moderator in this study was not experienced and was
  conducting focus groups for the first time. The moderator read extensively on how
  to correctly moderate focus groups. The moderator was also assisted by a trained
  researcher. However, as the qualitative research progressed, the moderator became
  more skilled and professional in eliciting information over the course of the
  research process. Also every effort was made to standardise the focus groups in
  terms of the initial questions asked and sequencing of subsequent questions.

- Due to time and financial constraints, the study could not be as detailed as first
  envisaged. Five focus groups were undertaken, with approximately an hour and a
  half spent with each focus group. However McQuarrie (1989) makes the point that
  many experts believe four focus groups to be sufficient to satisfy the criteria for
  credible exploratory research. Also, due to financial constraints, a wider and
  broader national study could not be conducted.

- Moderator inexperience may manifest itself as a source of bias. Bias may also arise
  as a result of the interaction among focus group participants. An effort was thus
  made to introduce as much uniformity as possible into the focus groups and
  interviews, even though this is often done at the expense of flexibility. Therefore, it
  was decided that both the focus groups and interviews would be semi-structured.
Every effort was made to assure participants in the focus groups of their anonymity and reinforcing the message that there was no right or wrong answer. Respondents were also encouraged to answer truthfully when expressing their views or sharing personal experiences, but no guarantee can be given that all information was factual. It is possible that given the tendency to gravitate towards group norms, that focus groups are particularly susceptible to these effects. While this possibility must be acknowledged, it is the researcher’s opinion that all respondents were open and honest in their responses to questions and advertisements.

This chapter has detailed the research methodology adopted for the purposes of this study and its limitations. The next chapter will discuss the results and findings obtained as a result of conducting this research.
Chapter 5

Results and Findings
5.1 Results in relation to objective 1 – What is the extent of binge drinking among the female college student population?

The extent of binge drinking among female college students is quite high as evident from this study. Of the 45 female students who participated in the focus group discussions, it was determined that at least 90% of them would now classify themselves as binge drinkers as a result of participation in this study. At the very outset of each focus group, participants were asked to define what they thought was meant by the term binge drinking. Of all the participants in the focus group, only four participants knew what the term binge drinking meant (consuming four or more drinks in a row on a single occasion). When the participants were told the official definition, the vast majority of them started laughing at this, suggesting that they exceeded this amount quite substantially on a regular basis. The majority of the participants did not know the official definition for binge drinking but did make attempts at it.

“I don’t think it’s a number. I think it is if you are drinking a lot in a short space of time”.

“Drinking more than you’re allowed in units per week - you’re only allowed 2 or 4 units a day I think”.

“You could drink a lot in one night, like drinking a whole bottle of wine before you go out. It is having it all together and getting wasted”.

“Binge drinking, it is where you have 9 drinks on a night out”.

“Drinking over what you are supposed to drink - the average amount for a woman in terms of units. Just doing the dog on it really - just keep on going”.

When the participants were asked if they thought that the definition was realistic, there was a resounding feeling that it was not and that it should be broadened. One of the main reasons why participants felt it was an unrealistic definition was due to the belief that people in Ireland are immersed in a drink culture and that the definition should be broadened to take account of our culture.
"The definition is not really realistic. It should be changed for the fact that our culture is soaked in drink".

"We can't really relate to that".

"Knowing the definition now, I wouldn't say to myself after having 4 drinks that I'm a binge drinker".

"If someone has more drinks than you and they can take it and they are fine, they are now considered a binge drinker. It is weird to then classify them as a binge drinker".

During the interview conducted with Professor Joseph Barry, he was also asked whether the definition was unrealistic and if it should be broadened:

"I think that it should be broadened as I think the word binge and the public's understanding of it is a problem. If something isn't credible, then it is hard to relate to and follow".

Professor Patrick Wall also commented on the definition as being too strictly defined and emphasised the need for it to be broadened to take into account the general lack of awareness amongst people of what the term binge actually means:

"I think generally speaking, people don't know what is meant by the term binge. Everyone will have a different perception of what is meant by it and that is an issue that needs to be addressed. I wouldn't classify myself as a binge drinker although I have drank more than 5 drinks on many an occasion".

When participants were asked to give their own views on what they felt would be a more accurate definition for binge drinking, there were some interesting comments:

"I would double it, so it would be maybe 8 drinks".

"I would associate it with blackouts, if you blackout every night you drink then you should be called a binge drinker".

Professor Barry and Professor Wall also commented that the official definition will need to be examined. Both experts were of the opinion that the definition was hindering prevention efforts at present and that if the public knew and were able to relate to a more
realistic binge drinking definition, then it may result in a reduction in alcohol related harm in Ireland.

At the very beginning of each focus group, participants were asked to state at what age they started drinking. The average age of initiation was around 15 years of age. This is consistent with the College Lifestyle and Attitudinal National survey conducted by Hope et al., (2005) in which the average age of onset was also 15 years of age.

“When I was younger, around 15 I’d say, I didn’t know how much I could safely drink so then I would have had nights where I couldn’t remember”.

“My first experience of getting polluted was when I was 14”.

“I would have started around 15 I think, it was probably after finishing the Junior Cert”.

“Ya I definitely started when I was 14 because I remember it was the night of my birthday and I drank way too much”.

The results from this study are consistent with previous research from Hope et al., (2005) as mentioned above and also with research from Europe (Institute of Alcohol Studies, 2007). This trend has to be worrying and it seems that many adolescents at this age view the onset of alcohol consumption as normative behaviour. More prevention efforts or educational campaigns therefore need to be targeted at this age group in order to combat the initiation of alcohol use at such a young age.

When the participants were asked about their typical average consumption on a weekly basis or what would be a typical night out for them on a college night, some of the results observed were quite alarming in terms of the level and type of alcohol consumed. For the majority of the participants, they all drink alcohol in a house with friends before they go to bars or nightclubs and the reasons given for this include “it’s cheaper” and “it’s a good laugh”. The alcohol of choice for most of the participants was vodka, wine and beer but it is the level of these types of alcohol consumed that is most startling. Most students freely admitted that they would drink a naggin of vodka (250ml or the equivalent of 8
standard shots) or a bottle of wine on their own, before leaving a house to go to a pub or nightclub:

"You'd always have a naggin anyway, or else maybe a bottle of wine".

"I would have a naggin of vodka at home before heading to town or bars".

"Usually before I go out, I would have a bottle of wine or a naggin - maybe both sometimes".

"I'd have a bottle of wine before I go out, because it's a lot cheaper to do it that way".

"You drink as much as you possibly can before you go out".

As can be observed from the quotes provided above, the prevalence of drinking at home was very evident in this study and also the popularity of consuming naggins of vodka. Furthermore, participants also admitted in the focus groups that they regularly brought alcohol with them into bars and nightclubs in the form of a naggin or a baby bottle of spirit concealed in a hand bag. Some participants also mentioned that they often brought bottles of beer, also concealed in a hand bag, into bars and nightclubs. This was mainly due to the price of alcoholic beverages in the bars and clubs as opposed to the relatively cheap price of alcohol products in the off-trade sector.

Once out in bars or nightclubs, participants were again asked how much alcohol they would consume. Again, vodka seemed to be the drink of choice amongst this target group and the levels consumed were again quite alarming:

"If you're talking a good night, you're talking 7 or 8 drinks, mainly spirits".

"You might have a few Miller and then hit the vodkas after it".

"Vodka, more or less all spirits, or alcopops".

"When I go to the pub I have a couple of double vodkas and then go to the club and have another 2 or 3 drinks there".
As can be observed from the quotes provided, focus group participants consistently mentioned consuming vodka on nights out. It would seem that vodka is the alcohol of choice amongst female college students and that it is being consumed on a regular basis at dangerous levels. Again, price was a factor when it came to purchasing alcohol while in a bar or a nightclub and focus group participants commented that they would quite often stick to a budget when out socialising:

“I’d usually bring around €40 with me on a night out and spend about €30 on drinks. That is why I drink before I go out as €30 wouldn’t buy you much in a pub”.

“I would only spend about €20 out in a bar or club as the drink is too expensive. That is why I might bring a naggin some nights with me - to save money”.

“I bring the naggin of vodka with me as I’m not paying €4 for a shot of vodka in a bar – it is way too expensive”.

The price of alcohol in pubs and nightclubs does impact on the actual purchase of alcohol by students while out socialising and does explain why the majority of them decide to bring their own alcohol with them. They will have purchased this alcohol in an off-licence beforehand.

In their report, Dantzer et al., (2006) reported that Ireland has the highest proportion of female heavy and binge drinkers among university students in 21 countries. This level of alcohol consumption by female college students is reiterated in this study. As evidenced from the results provided, female alcohol consumption among college students is at a very high level and drinking occasions appear to be occurring on a frequent basis.

When participants were asked about the health consequences of consuming large quantities of alcohol, their knowledge of such was poor and dismissive. A few of the participants pointed out that it can lead to liver disease, affects the skin, kills brain cells, increases blood pressure and increases risk of stroke. When participants were told of other potential health consequences of consuming alcohol, for example increasing the
potential risk of getting breast cancer, they were unfazed and only regarded the short term effects such as a hangover or bad skin for a few days as things that affect them:

“Well we know there are health effects, but we do not think of them. There are health effects with everything - you worry about that when you are old”.

“When you are out drinking you are not really thinking about the health consequences and it’s something you would not think about. You would not say when you order your next drink - oh this drink is going to cause damage to my liver”.

“We do know the damage that alcohol can do but it is your own choice whether you want to drink or not and at what level”.

Participants were then asked if they were made more aware of the longer term effects of what their current alcohol consumption was doing to them physically, would it entice them to consume less? Again, the majority of participants were dismissive and only worried about the short term effects as opposed to the longer term effects:

“You hear stories about older people and what happened to them and people say it is because of drinking and you say oh I better cop on but you don’t actually properly think about it at the time. You are not actually that worried about it”.

“I do not think about it because I am young. I am grand. I do not think I am doing damage to my liver”.

“At this minute it would bother me, but when you are in the pub then on a Friday or Saturday night and you have had a few, you say that is not going to happen to me and you just worry about the hangover you might get the next morning”.

Professor Barry reiterated the views expressed by focus group participants. He has observed from his own research that people in this target group do not think long term when it comes to their health but only of the short term consequences.

“This particular target audience do not think long term. They only worry about the short term effects of their drinking, such as the hangover or maybe getting sick. Some people are just risk lovers and so are willing to risk their health in the longer term by continuing to drink at excessive levels on a regular basis”.

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Therefore, college students in particular need to be made more aware of the long term health effects that their current levels of alcohol consumption, could potentially result in. There is no guarantee that students would recognise these long term health effects as potentially life threatening and ultimately reduce their levels of alcohol consumption. However, as mentioned by Professor Wall, more information of the potential long term health effects need to be directed at this target group in order to make them more conscious of them and therefore take the necessary action:

"In order to get people to drink less, then they need to be informed on a more regular basis of the potential consequences their alcohol consumption patterns are having on their long term health. If they are aware of these potential life threatening health effects from an earlier age, it will make them think more rationally about their alcohol consumption".

As evidenced from this study, the level of binge drinking among female college students in Cork is dangerously high. Therefore, it is very apparent that female college students are consuming dangerous amounts of alcohol on a consistent basis and that they have very little regard for the consequences of such. The quantity of alcohol, particularly spirits, and the frequency at which it is being consumed are the main cause for concern. There is a need to re-define the current definition of binge drinking. Very few of the participants in this study knew the official definition and having being informed of the current definition being used, were very dismissive of it and viewed it as not being realistic and relatable in our society. Both public health experts interviewed for the purposes of this study were also in agreement that the current definition was inadequate and would need to be looked at in order for people to be able to relate to it.

The high level of binge drinking that has been observed in this study, highlights the general lack of awareness that currently exists in relation to the harmful consequences, both physical and psychological, of binge drinking on a regular basis. The majority of the participants in the focus groups had very little regard for the potential consequences that their binging could have on them, not only in the short term but also in the longer term. The majority of participants felt that their alcohol consumption at present is just “normal”
and "part of college life" and that they will "grow out of it" after they finish college. These social norms have been created by a "wet" culture and therefore it is necessary to change these beliefs if alcohol consumption in Ireland is to be reduced. By changing these norms, it may be possible to reduce the levels of binge drinking, not only among female college students, but amongst the population at large. How to change these norms is the challenge that our policy makers face in the future.

5.2 Results in relation to objective 2 - What are their motivations, beliefs and expectancies about binge drinking?

As mentioned in Chapter 2 of the literature review, there are a number of motivations that can lead to people consuming alcohol. Studies of motivation for drinking in student samples have identified drinking for social reasons, drinking to cope, and drinking to enhance mood as the key determinants of alcohol consumption (Stewart et al., 1996; Sher et al., 1996). These motivations can be different for every person, but from the focus groups conducted it became apparent that these were their main motivations.

There was general acceptance among focus group participants that binge drinking was seen as "normative behaviour" during the college years. It became very evident while conducting the focus groups that participants consumed a lot of alcohol on a regular basis and that they felt that it was "not such a big deal" and "that everyone was doing it". Consuming alcohol was viewed as a common social activity and it was deemed by focus group participants as socially acceptable to be drunk in public places in Ireland. Thus, drinking for social reasons is a key determinant in identifying why female students decide to binge drink:

"I see it as normal and as part of college".

"The reason I drink is because it gives me confidence. It makes me more relaxed and more sociable especially when I started college".
"I drink to just relax and have a laugh, not that I can not have a laugh without drink but I find things funnier when I have drink. It gives me more confidence".

"Even when you are in 6th year, you are so excited about going to college and not because you want to learn, it is because you want to go drinking".

As evidenced, participants believed that alcohol played a vital role in the whole college experience. Many viewed alcohol as a key determinant in making new friends and just “fitting in”, as well as helping them relax, feel more confident and boost their mood. This view is consistent with Boys et al., (2001). Drinking for social reasons is also related to positive reinforcement in that students fear becoming rejected by their peers and thus socially isolated. This motivated them to drink at levels that they may not be used to and may not want to.

Drinking to cope is another motivation that warrants further exploration. A number of participants highlighted the fact that stress, especially in their third and final years in college had led to them consuming more alcohol as opposed to their alcohol consumption lessening due to more academic pressure and time constraints:

"I think one of the reasons that you drink more in 3rd and 4th year is because there is more stress involved and you have to start thinking what am I going to do when I am finished college. So then people just go and enjoy their last couple of years”.

"I think a lot of students start drinking heavily in college to relieve the stress of moving away from home initially and also use it as a coping mechanism throughout college when stressful situations present themselves, like exams, projects, etc.”

Drinking to deal with stress or anxiety or using alcohol to regulate negative emotions, are examples of using alcohol to cope (Cooper et al., 1995). Very few participants mentioned the use of alcohol as a mechanism to deal with depression but could appreciate how other people may use drink as a coping mechanism when dealing with bad experiences in their lives:
"I could see how a person might become dependent on alcohol to deal with tough situations".

"You do hear of people getting addicted to alcohol as they are in a state of depression after something terrible has happened to them or their family".

As noted in quotes above, when a person moves away from their family home for the first time, this can lead to a person using alcohol as a coping mechanism. As stated by Baltes (1987) and Cantor and Langston (1989), this transition involves both gains and losses such as new friendship networks, but separation from family and old friends; more academic choices, but new academic demands; and increased independence, but decreased parental guidance and support. All participants were asked of their present living arrangements while attending college with the vast majority of students living in student residences with only a few students still living with parents. Participants were asked if this had impacted on their alcohol consumption. The students who were now living away from home said that it did result in them having more freedom and autonomy to consume more alcohol than if they were still living with their parents:

"I think it is not being at home and having no parents around telling you not to drink because I know when I am at home, I would not be absolutely hammered".

"When you are at home, you are not going to go into your parents at 7.30pm ready to go out for the night, whereas when you are in college, you would definitely start drinking around then".

"When you are in college you might go out on Tuesday and Thursday nights and you do not have to worry about going home legless, you are going back to your own house".

These views were also stressed by Baer and Bray (1999) who concluded that alcohol use tends to increase as adolescents become more independent from their parents and as parental monitoring tends to lessen. The majority of the participants in the focus groups concurred with these views and it demonstrates how this increased level of independence allows students to engage in heavy alcohol consumption without having to deal with the potential confrontation from parents over this increase in alcohol use.
Individuals use alcohol to enhance their positive mood or well-being. Students who drink in order to enhance a good time, report higher quantities of alcohol consumption and are more likely to binge drink (Cooper et al., 1995; Reid et al., 2003). From the focus groups, it was very evident that the majority of participants use alcohol to enhance their mood and help them enjoy the college experience by having a good time whenever they are consuming alcohol:

“It is just a laugh when you go out drinking with all the class”.

“The reason you drink is because it helps you have a good time when you are out”.

“You know you are going to have a good night when you have a few drinks in you. When you do not drink on a night out it can be boring”.

These views are consistent with those expressed by participants in the study by Guise and Gill (2007) where participants stressed that the aim of drinking was to reduce inhibitions and to have fun. This is also similar to the findings of MacAskill et al., (2001). As a result of conducting this study, it is observed that the vast majority of participants were also adamant that they drink alcohol in order to help them have a good night out and to also reduce inhibitions, especially when starting college, when they might use it to help them make new friends.

At the very outset of each focus group, participants were asked for their reasons in relation to why they started drinking, particularly in most of their cases at around 15 years of age. The explanations received were consistent with the literature review conducted in previous chapters and some of the reasons included peer pressure/bonding, fun, boredom (nothing else to do), drinking as a normal activity, alcohol being easily accessible, rebelliousness, etc. These common reasons were discussed in every focus group conducted and the responses from the participants were interesting with some conflicting views also expressed by some participants who didn’t agree with some of these reasons.
Peer pressure/peer bonding has been found to be one of the main instigators of substance abuse among adolescents. Focus group participants were asked directly if peer pressure/peer bonding played a role in them starting drinking at such a young age. A lot of participants freely admitted that it did play a part in them starting at this age:

“It was because all the friends I used to hang around with were all older than me. So they were drinking longer than I was. Then one night they just rang me and they said ‘come drinking’ and I did. Only for them I probably would not have started drinking at 14”.

“When I was in school I would say ‘what will we do for the weekend?’ and one of my friends would always suggest drinking so I would go do that then most weekends”.

“If your friends are going to do it, then you are going to do it. It is the thing to do. If everyone is doing it, you have to try it as well so yes that would have been peer pressure”.

“When you are young, everyone is doing it and you do not want to be standing in the corner on your own”.

The other reasons, as mentioned above, common among participants in relation to why they started drinking were “everyone else was doing it - it was everywhere”; “having a laugh with drinking”; “there was nothing else to do”; “it was down to curiosity as well”; “it was normal”; “young people can get it easily - no one checks for ID”. As can be seen from these quotes, the majority of participants all had similar experiences throughout adolescence and there were a number of reasons why they had commenced drinking at such an early age.

Participants were then asked if peer pressure/bonding had led to them consuming a lot of alcohol when they started attending college. The transition from adolescence to adulthood is accompanied by intensified contacts with peers and an entrance into new social contexts and activities. During college, peers serve as a major means of support and guidance and are perhaps the most important social reference group in the college environment (Perkins, 2002). Participants observed:
"I probably was drinking a lot in first and second years in college as I was trying to get to know the people in my class and make new friends".

“When you first start college, you only know people from home, so going out drinking with the class is one way of just getting to know more people and making new friends”.

“You go to a lot of class parties in first and second years in college. You get loads of free drink at them but the reason you go is to meet new people and to get to know more people in your class”.

These opinions expressed by focus group participants reaffirm the view that peers are probably the most important social reference group in college. The need to make new friends was referred to consistently in focus group discussions as the main reason for consuming excessive amounts of alcohol, especially at the beginning of college life. Participants felt that almost everyone consumed the same amount of alcohol and didn’t overestimate the amount of alcohol consumed by their peers:

“I think we all drink around the same to be honest”.

“I do not think I drink more than any other person in the class. Most girls I know would drink the same amount whenever they go out”.

“A lot of the girls my age that I know would all nearly drink a bottle of wine or something before they go out so I think we all drink around the same”.

These observations are consistent with the literature review conducted. Students perceptions of peers’ alcohol consumption use predicts and explains a significant amount of variance in alcohol use (Perkins et al., 2005). It was deemed in the focus groups, that participants were very accepting of others’ heavy drinking and were of the opinion that their heavy drinking as a result, was not “out of the ordinary” but “was normal”.

According to Schulenberg and Maggs (2002), most people view late adolescence and early adulthood as a time when drinking is common and accepted. Among those who drink, the large majority perceive social and coping benefits accruing from alcohol use and even occasional heavy drinking. During the focus groups, it was noted that the
participants in general agreed with this statement. They viewed their drinking habits as a
typical college experience and were almost of the belief that it was something that they
had to engage in. A few of the participants admitted that they can’t socialise without
having alcohol:

“If I go out and I am not drinking, I find it boring. I would have a terrible night. I have to get drunk on a
night out”.

“If you go out and do not drink and everyone you are out with is getting hammered then it is really
annoying. It would almost make you start drinking and play catch up”.

“I was out with some of my friends who were all getting really drunk and I was not drinking that night and
I said after that, I am never doing that again”.

“I have been out on nights where I have not drank, and always swear to myself never to do it again as it is
just not the same. Sometimes I would rather just stay at home and not go out”.

As can be seen from these quotes, socialising and consuming a lot of alcohol is deemed
normative behaviour amongst this target group. Participants stressed that attending
college and the need to make new friends was a contributory factor in them consuming a
lot of alcohol initially. Also, the freedom and autonomy experienced from a lack of
parental supervision, for in some cases the first time, had also resulted in them socialising
more often during the college term. The majority of the participants did view their
current alcohol consumption levels as normal amongst their peers and felt that they
couldn’t function socially without consuming alcohol. The view that one needs alcohol
in order to enhance a good time and in the process end up getting really drunk was
commonly accepted amongst focus group participants.

The views expressed by participants in this study can be viewed as alarming yet not
entirely surprising as previous studies have also found similar results. Drinking to
intoxication is a common occurrence among college students not only in Ireland, but in
many other countries as demonstrated in Chapter 1 of this study. The perception of
drinking alcohol in binges and in heavy episodic periods and the acceptance of such, by
college students in particular, needs to be adapted in order to reduce alcohol consumption not only among college students, but among society also.

5.3 Results in relation to objective 3 - What are their coping strategies in relation to binge drinking?

The “I am the exception to the rule” mentality allows a person to convince themselves that they are somehow exempt or impervious to a particular threat. For the purposes of this study, this threat was consuming excessive amounts of alcohol resulting in harm being caused to a person. It became very apparent while conducting the focus groups with the female college students that there was a distinct disregard for the possibility that they could themselves become a victim of excessive alcohol consumption. Only a limited number of participants admitted that they had suffered an injury or illness as a result of consuming too much alcohol on a particular occasion.

One of the main coping strategies for this particular group is the constant reference to the role that friends play in ensuring that nothing too extreme or potentially dangerous will occur to them while in a state of intoxication or when they are binge drinking. In every focus group conducted, when participants were asked if they could see themselves falling over, injuring themselves, being sexually assaulted etc., the general response in all focus groups was:

“No, it would not happen to me, my friends will take care of me”.

When focus group participants were asked for some instances where they could potentially see themselves in dangerous situations, there was a general reluctance among them to divulge opinion on this issue. They continuously referred to the role their friends play in such situations. This may have been due to the presence of their peers. Opinions on this sensitive issue were interesting:
“I have never got that bad that I have had to be carried home as I tend to sober up towards the end of the night but friends would still look out for me”.

“If you see that your friend is plastered then you say to yourself, that is enough for me, I am going to take care of her. I just stop drinking if one of my friends is really bad”.

“I would not say I rely on my friends, but if any of them were in a state, I would mind them as they would do the same for me”.

“But we all stay together. We all stay in the same place and we all mind each others’ drinks when we go to the bathroom”.

There was a sense among focus group participants that girls in particular will always ensure that their friends will look out for one another on a night out and that if one of them does get really drunk that she will be taken care of and brought home safely. They were also adamant that if one of their friends was getting drunk and being brought home on a regular basis, they would let them know that she was drinking too heavily and had to reduce her alcohol consumption or else risk their friendship:

“I have told a friend of mine to start changing or else stop coming out with us”.

“There have been occasions where I have told some of my friends that I was getting sick of taking care of them on nights out and to stop drinking as much. Some of them listen but others just do not care”.

“There was a girl who we used to go out with a lot who had to be brought home hammered most nights by a few of us so we eventually just told her that she was not invited out with us anymore”.

When they were asked to assume what would happen to them if their friends were not around and they could be in a precarious predicament as a result of consuming too much alcohol, again, there was this constant referral to the role that friends play and that girls in particular will always look out for one another while out in social settings:

“My friends would never leave me”.
"I have never been in a situation where at least one of my friends has not been with me so I always assume I am going to be ok on nights out".

"If I am ever on my own when leaving a club, I just stand by the door and wait for my friends. They would never go home without me".

"This is where I think girls differ from lads. Lads are on their own hammered on the streets after clubs and none of their friends are around. You would rarely see a girl on her own".

These views are very interesting and perhaps indicate that females tend to overestimate the role their friends play in ensuring their safety. However, it must also be stated that every focus group participant in this study was very insistent on the important role their friends play in ensuring their safety and this has to be respected.

A substantial number of the participants in the focus groups also referred to the setting of a limit on the number of drinks they consumed on a night out. They felt that they needed to set this limit in order to stay in control and to also make sure that they were "looking out" for their friends:

"I have a limit. I would never have more than 4 or 5 really. I do not want to get out of it".

"You start to feel it some nights, you say 'no more' and that is usually around 5 drinks for me. I would very rarely go over that".

"There are girls who get drunk and go home with guys and take no notice of it, but I am definitely not like that. I know my limit, I am 23 now".

"It could have happened in the past but not now as I take it easy and I kind of set myself a limit as well".

"I would set myself a limit some nights alright but only if I have to do something the next day like get up for work or go to college early".

When focus group participants were asked if the setting of a limit occurred every night they went out socialising, they generally were in agreement that it did occur on most occasions but there were nights when they wouldn't set a limit:
"If it was someone's birthday or you are celebrating the end of exams or something, then you would generally drink more because you tend to be out longer than a normal night".

"There are going to be nights where it is hard to stick to a limit, like a college ball or wedding, so you drink more than you should sometimes".

This acknowledgement that there are some occasions where the setting of a limit is difficult to abide by, is to be expected and is deemed socially acceptable in Irish society. Professor Barry also stated that limits can be easily broken depending on the environmental circumstances:

"The norm is to drink a lot, say if you go to a wedding, it is practically impossible to drink to the recommended guidelines".

There were a small number of participants who did not set themselves any limit on a night out but felt that they still knew when to stop drinking:

"I do not set a limit on nights out as I just know how much I can take on a particular night. Every night is different".

"I would not set myself a limit as I think I know when to stop, so some nights I might have 3 drinks and 7 drinks on another night. I know myself when I have enough".

At this stage, participants were also asked if any of them ever alternated their drinks. This is where one would have an alcoholic drink followed by a drink of water. A minority of the participants admitted to doing this:

"I always do that or else if I am feeling dizzy I would drink water".

"Sometimes I would do that, as I just want to stay in control and not get totally hammered".

However, for the majority of the participants, the notion of alternating drinks with water seemed totally against the ethos of why they were out drinking in the first place:
"I would never do that, maybe only after taking a shot or something as sometimes I would feel like getting sick after them".

"Not really, I might have a glass of water at the end of the night or something".

"I would not know of many people doing that. Some nights you just go out for a few drinks whereas other nights you just go out to get drunk".

"I would hardly know anybody who does that. It would be actually weird to see someone doing it to be honest".

The recommended drinking guidelines that exist at present stress that alternating alcoholic drinks with water or a soft drink is advisable to avoid getting really drunk. However, observations from the focus groups established that very few participants abided by these guidelines or knew of people who also alternated their drinks on a night out.

The three issues dealt with above (use of friends, use of limits and alternating drink) are known as adaptive coping responses. These are positive responses to the threat posed by excessive drinking, whereby the threat is minimised. The role of friends and the setting of a limit were both used quite frequently in all of the focus groups with little emphasis being placed on the alternation of drinks. These coping responses served to legitimise the excess use of alcohol and that nothing out of the ordinary was going to happen as a result if these coping responses were in place.

After observing and listening to these responses with regard to their coping strategies, the participants were asked if they relied too much on their friends and if they over-exaggerated how much control they were in after consuming so much alcohol. Some of the participants agreed that they think they are probably more in control than they realise at the time:

"You probably think you are more in control than you actually are. That is what the alcohol does anyway. It gives you a false sense of security".
“You probably exaggerate your degree of control as even one drink does affect you, so if you have four drinks, then you are not in as much control as you probably think you are”.

“You probably think you are in more control than you might actually be”.

“Well, if I say, I am in control, maybe I am not in as much in control as I think I am”.

“If you are after having a bottle of wine and four drinks then you are definitely affected by the alcohol. But you think you are still in control because you might have got home grand and it was just like any other normal night out, which is awful because it gives you a false sense of security”.

There was an acknowledgement by the majority of focus group participants that maybe they were not in as much control as they think they are after consuming a substantial quantity of alcohol. This certainly had an impact on participants during the discussion with many of them openly admitting that it was something that they never really thought about before and that being in control is something they take for granted. After viewing the physical threat appeals in particular, this realisation was observed and it made them think more about the levels of alcohol they were consuming and the potential impact this could have on them if they continued to drink at these excessive levels.

“After viewing some of those advertisements, I can relate to them and it does make me realise that you do take your safety for granted on nights out a lot of the time”.

“After viewing the advertisements and also just discussing these issues it would make you think more about the level of alcohol you actually drink and the potential consequences”.

“Honestly, I have never really thought much about the implications of drinking before as nothing serious has happened to me or my friends on nights out”.

Overall, it was felt that focus group participants were too reliant on their friends on nights out in ensuring their safety. As established in some of the quotes provided above, the participants constantly referred to the role that friends play when out socialising and that they perhaps over-exaggerated this protective role on some occasions. The setting of a
limit was also discussed with a number of participants admitting that they regularly set themselves a limit but that they exceed this limit on some occasions. It must also be stated that there were participants who didn’t feel there was a need to set themselves a limit on a night out as they knew when they had to stop drinking. Very few participants alternate their drinks on a night out with the majority admitting that it would be counter productive to do so in terms of getting drunk. This realisation that the main reason for drinking alcohol was to achieve a state of intoxication to enhance a good time was generally observed from focus group discussions with coping strategies being adopted to ensure they would not suffer any negative consequences as a result of excess alcohol consumption.

5.4 Results in relation to objective 4 - Are social threat appeals more powerful than physical threat appeals in reducing binge drinking among female college students?

Having assessed both social and physical threat appeals through the use of various Public Service Announcements (PSAs) from Ireland, the UK, Australia and the US, it became evident from conducting the focus groups that physical threat appeals are more powerful than social threat appeals. When asked to choose which PSAs were more effective, every participant agreed that the physical threat appeals proved more effective than the social threat appeals. Observations from the focus groups showed that the female students experienced increases in knowledge, perceived risk and responsibility, and a decrease in perceived acceptability of binge drinking after viewing the various physical threat appeals as opposed to the social threat appeals. One of the main reasons behind these observations related to fear itself, of which they perceived more from the physical appeals rather than the social appeals - the latter the participants found ineffective at reducing binge drinking, particularly among their age group. It became apparent throughout all the focus groups that the participants needed to be frightened in order for them to reduce their levels of alcohol consumption. This is consistent with a variety of studies that have found that the more pronounced the fear evoked by an advertisement,
the bigger the persuasive effect yielded (Sutton, 1992; Rotfeld, 1988; Boster and Mongeau, 1984).

The physical appeals which had the most effect on this target group were the advertising appeals which dealt with the issue of sexual assault and rape. In total there were four advertising appeals which dealt with these issues and it must be stated that it was these types of appeals which had the most effect on the participants. Participants were asked if these types of appeal were to be shown on Irish television, would they have an effect on their drinking? Almost all participants agreed that if these types of appeal were shown on Irish television, then it would lead to them thinking more about their alcohol consumption and definitely raise more awareness, especially amongst this target group, of the potential consequences of binge drinking. When asked if they were shocked after viewing the appeals, the reactions were very interesting:

“You would get a shock. You do not think that is going to happen to you, whereas in fact, it could”.

“Everybody knows that it could happen but when you see a situation like that, it frightens you”

“Some of the advertisements on TV at the moment do not do anything. You are actually laughing at them. There is no shock factor. The rape advertisement and the other one would definitely affect me”.

“I think more so than any advertisement that is on Irish TV at the moment that those types of advertisements are a lot more effective. It would hit home with some people looking at those advertisements. I do not think anybody would forget them in a day or two. They would remember them”.

“I could see it happening to people because you do see people who are absolutely demented when they are out and they do not know what they are doing. That type of appeal would frighten people who get into that state when they are out and make them conscious that it could happen to them”.

Of the four appeals shown to the participants dealing with the issue of rape and sexual assault, it was felt that advertisement 4 was the most effective. This advertisement depicted a girl called Lisa who had consumed a lot of alcohol and was sexually assaulted by a man in an alley way after a nightclub. The reactions after the advertisement was
shown were one of complete shock and disbelief as most of the participants could relate to the situation up until the point where they hear the girl screaming at the very end of the advertisement. Reactions were as follows:

“I think this advertisement was the most effective because you can hear her reaction. You can hear her scream”.

“For this advertisement, I was like ‘oh my God’ at the end. He was watching her the whole time and he took advantage of her. That really scared me”.

“It is very scary but it does happen. I can relate to it”.

“You can relate to it. She started out really quiet and then ended up getting really drunk and taken advantage of’.

“I know I could totally see that happening to me if there were not people around, so that is scary”.

“The majority of rapes happen when the person is intoxicated like that girl there in that advertisement, and also when the person is left on their own”.

The reactions to this advertisement in particular illustrated to the researcher that these types of appeal invoke fear in this target group and would definitely have an impact on female college students’ alcohol consumption. The fact that almost every participant could relate to the girl in the advertisement or knew of somebody who had been in a similar situation, made this particular advertisement the most effective.

Similarly, advertisement 2 also had an effect on the participants as again they could relate to the appeal and saw it as a realistic situation that could happen. The advertisement shows a girl attending a house party with her boyfriend and she ends up consuming a lot of alcohol shots. It then proceeds to a bedroom scene where they are both kissing until the boyfriend has to leave to vomit as a result of consuming too much alcohol. Other boys at the house party see that this girl is on her own and vulnerable and the advertisement ends with them closing the door of the bedroom leaving it up to the viewer to assume what is going to happen next. Reactions to this advertisement were as follows:
"That one is scary as they see her vulnerable and they take advantage".

"That advertisement is good because in a bad way it leaves it to your imagination as to what is going to happen next, which is actually worse as it makes you think about it and makes you think 'Oh God, what are they going to do to her now'?"

"You could really see that scenario happen. I thought that advertisement was the most effective".

"I think that advertisement is very effective. If you are trying to highlight women drinking and her passing out there, it is more effective as you feel 'oh my God if that happened to me'!"

Again, as can be noted from the reactions above, this particular advertisement also proved to be very effective in stimulating an emotional response from focus group participants. Participants agreed that this type of appeal was again very realistic and many could foresee this situation occurring in real life.

Reactions to advertisement 3 were also interesting and an advertisement with this approach may also prove effective at raising awareness of the link between binge drinking and rape. The advertisement is more factual than the other physical appeals shown and gives the viewer various statistics about the level of binge drinking and associated rapes. A few of the participants in the focus group were particularly affected by this advertisement with the emphasis on statistics being one of the main reasons:

"I did not think 1 in 20 rapes are due to excess drinking. That is a lot".

"The other advertisements were a lot noisier and it was hard to get everything that was happening in them. When the statistics came up about the rape in that advertisement, got an awful shock".

"It was more informative than the others. Informative advertisements definitely work".

This particular approach for a physical appeal may sometimes appear to be less appealing but can prove to be more effective. By providing the viewer with stark statistics in relation to the association between binge drinking and rape, it presents the viewer with an
opportunity to realise that women are raped when they have been binge drinking on an all
too often regular basis. This “shock” factor was observed amongst focus group
participants after viewing this particular advertisement.

Very few of the participants in the focus groups commented on advertisement 1 which
was the first advertisement shown. The advertisement shows a young female in a
nightclub having a good time and consuming a lot of alcohol throughout the night. At the
end of the advertisement, a voiceover explains the consequences of consuming too much
alcohol in that it can lead to sexual assault. The reasons for this lack of comment may
have been due to the fact that the advertisement failed to explicitly show the woman in
any real apparent danger. Thus, once the focus group participants were able to relate to
the characters or the plots portrayed in the advertisements, such as advertisements 4 and 3
in particular, the more effective the advertisements proved to be in instigating discussion
about the dangers of binge drinking and ultimately could prove to be effective at reducing
binge drinking.

The other physical threat appeal advertisements shown to the focus groups were
advertisement 5 and 6. Advertisement 5 shows a real life situation where a girl is so
drunk that she is lying on the ground and does not know where she is or how she got
there. Reactions to advertisement 5 were mixed with a lot of participants suggesting that
this type of appeal would not be effective as it just is not shocking enough and that scenes
similar to it, happen on most weekends they are socialising and so would not make them
drink less:

“We see that every weekend and we are used to it so there is no real shock in it”.

“I do not think it has as big an effect as the other advertisements. We are so used to seeing that happen on
the streets. When you come out of a club you always see someone nearly getting sick or falling against a
wall or something”.

“You kind of laugh more at those advertisements. You see it happening all the time but you generally take
no notice of it”.

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"You can not really relate to it. You are more wondering what did she do? What has actually happened to her. You're not getting the full story".

"It is a real life scenario but you can not relate to it. It does not all the time".

This type of real life appeal proved to be totally ineffective amongst focus group participants in ultimately trying to change their behaviours towards heavy alcohol consumption. These types of appeal are shown regularly on TV yet observations from this study conclude that they would not prove to be effective if they were to be shown on Irish TV, with some participants stating that these are usually "laughed at". However, the woman's face was blacked out in the advertisement to protect her identity. This affected the visual quality of the advertisement, thus the threat posed may have been minimised. It would be interesting to see what actions would have been to this type of advertisement with Irish participants and with restrictions on the visual aspects of the advertisement.

Advertisement 6 shows how alcohol can make a person feel invincible and is aimed at more of a general audience as opposed to just female viewers. Actions to this appeal were very strong in relation to the level of shock involved. The participants agreed that such an advertisement would be hard to forget and that if these advertisements need to be shown on Irish TV.

"That is a brilliant advertisement because it shows what drink can make you feel like you can do anything. It messes with your mind."

"If you see that advertisement, it is true. You do think you can do anything when you are drunk".

"The alcohol makes you feel invincible. You think you can anything".

"Stuff like that does happen. The more graphic the advertisement, the more is going to stick in your mind".

"It is very scary. It actually happens, as people think they are invincible, hey are drunk and can do anything".

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This particular advertisement provoked a very strong response from focus group participants and this was mainly due to the high level of shock at the circumstances portrayed in the advertisement. The boy in the advertisement was killed as a result of falling from a four storey building with death being regarded as the most obvious serious consequence of consuming too much alcohol. It was agreed that if this type of appeal was shown on Irish TV then it would make an impact in terms of raising awareness among a more general audience of the false sense of invincibility that alcohol instils when excessively consumed.

The effects that the social threat appeal advertisements had on the participants are also very interesting to note. They did not prove to be as effective as the physical threat appeals yet did invoke some worthwhile discussion. While these appeals were being shown, it was observed by the moderators that there was a lot of laughing and scoffing during them, suggesting that the participants were very dismissive of these types of appeal and generally did not find them realistic or in any way effective. Advertisements 7 and 8 were very similar and used the same tagline at the end “You wouldn’t start a night like this, so why end it that way”. The advertisements were specifically aimed at young female women and so were deemed to be ideal for the purposes of this study. The reactions to both advertisements were dismissive and participants commented that they were not shocking enough:

“We laughed at the last two advertisements there now, so they need to be more shocking than that. They are just wasting their money with those types of advertisements”.

“Nothing major has happened. The girl is drunk and on the floor and got sick. I was laughing at that one”.

“They are not shocking at all and I really do not think they are taken seriously by people our own age. It is always this type of advertisement they show on Irish TV and they are not effective at all”.

“Those types of advertisements there just do not work. There is no shock factor in them. So what if she loses a bit of a heel on a night out”.

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This general dismissive reaction would suggest that social appeals are not effective for college students as they are not relatable, shocking or real enough to make them change their patterns of drinking. When participants were asked their reactions after viewing these appeals some of the words and phrases used were "weird"; "only alright"; "the advertisements won't really make much of a difference"; 'no one would ever get that bad really".

Advertisement 9 was the only Irish advertisement shown to focus groups and the majority of participants were able to recall the advertisement as it was shown. It gives an account of a girl's typical night out with her friends and involves drinking a lot of alcohol, vomiting into a sink in a bathroom and falling over waiting for a taxi home. Again, the majority of the participants in the focus groups were very dismissive of this advertisement and believed that this particular appeal would have no effect on reducing the levels of alcohol consumption among young fem:

"I have seen that advertisement before and always used to laugh at it. I mere is nothing new in it that we have not seen before and is typical of the useless advertisements that how on Irish TV. I think these types of appeals have no effect whatsoever.

"I have seen that advertisement. I and my friends used to always laugh abwhen we saw it on the TV. It is kind of funny actually but there is certainly no shock value in it. It dey would not make me think more about my drinking".

Reactions to this particular advertisement demonstrate the appeals which are currently being shown on Irish television are totally ineffective they need to be more shocking if they want to reduce overall alcohol consumption s in this country. This issue is discussed in more detail below.

Advertisement 10 proved to be the most effective social threat shown. The appeal deals with a double scenario situation involving a woman at a party. In the first scenario the woman drinks responsibly and can remember ig a great night. The second scenario involves the woman drinking to excess, xing and embarrassing
herself in front of all her friends and other people at the party and she is unable to remember the previous night the next day. A number of theocus group participants found this advertisement to be appealing as it was very different to any advertisement they had viewed before and also could relate to the double scenario situation:

“I thought that was good as it gives you both sides of the story - getting hammered and making a show of yourself or else just having a few drinks and really enjoying yourself”.

“I thought that was a very good advertisement now as it was appealing and you could relate to it as well but I still do not think it would reduce my drinking”.

“That is a very clever advertisement as it shows both scenarios and then it puts you to decide which situation you would rather be in”.

However, participants were still adamant that even after viewing this particular advertisement that it wouldn’t shock them sufficiently or result in them reducing their alcohol consumption but it would make them think in particular about the setting of a limit on nights out.

In all the social fear appeals shown to the focus groups, there were images of girls vomiting as a result of drinking too much alcohol. When participants were asked for their views on this particular aspect, again they were very dismissive and accepted it as a common consequence of consuming too much alcohol:

“If you go into a girl’s toilet in a nightclub, all you can hear are girls vomitir. It happens everywhere”.

“There is not one night you can go out without seeing some girl getting sick. Because they are behind closed doors it is not noticeable but if you saw it, it would be lot worse”.

“The advertisements with sick are not effective. You could get sick randomly a day in college. People do not associate with the sick part really and it does not really affect our age group. I know myself, I have not been sick from drink since I was 17”.
A number of the participants mentioned during the discus that they felt that the appeals on Irish television at present are not strong or shock enough to make them change their behaviour:

"We are harder to shock. Something needs to happen in the advertisement".

"The advertisements in Ireland come on and they do not affect me at all. They really need to have the shock factor. They are pointless. They are wasting money on advertisements that make no difference to people".

"Whenever I see the advertisements come on about drinking responsibly, I just take no notice of them at all. They contain scenarios that we have all seen or being through elves and we are all fine so there is no shock in them".

Participants in the focus groups were unaware of the fact that alcohol industry in this country, contributes to the production of the alcohol awareness campaigns on television. When they were informed that Diageo and Heineken fund these appeals through the body MEAS (Mature Enjoyment of Alcohol in Society), they were asked as they had formed the opinion that they were made by a Government body:

"If the advertisements are funded by the drinks industry then that is why they are not shocking enough. They are only looking after their own profits and just want to be seen acting responsible".

"I am very annoyed now that I know that. I always thought it was a Government body that made the advertisements. I never knew Diageo were contributing to the making of them".

Professors Barry and Professor Wall also commented on the role of MEAS in promoting responsible drinking in Ireland. Both public health experts of the opinion that as MEAS was funded by the alcohol industry then there won’t advertising campaigns that highlight the dangers of drinking to excess. Professor Banned:

"The alcohol industry will not agree with advertising campaigns that will highlight public health issues and neither will MEAS"
Professor Wall was also of the opinion that MEAS doesn’t serve a real purpose as it is answerable to the industry and so will never broadcast advertisements that could impact upon the industry’s profits:

“MEAS is there to act as the socially responsible arm of the industry in Ireland and in my opinion does not really serve any meaningful purpose as they will never produce advertisements that depict a person in danger as a result of consuming too much alcohol”.

This lack of awareness may not be limited to just female college students, but to the population at large. Therefore, it is imperative that if alcohol related harm is to be reduced, then an independent body needs to be empowered to instigate awareness campaigns that highlight the true extent of alcohol misuse and promotes harm reduction as opposed to responsible drinking.

The views expressed by the participants after viewing both physical and social fear appeals clearly demonstrate that physical fear appeals work in terms of potentially changing a person’s behaviour and ultimately could work at reducing the level of binge drinking among female college students. It can therefore be stated that in this study, female college students felt that the physical threat fear appeals were more powerful in potentially reducing binge drinking. These results are consistent with a study conducted by Shin et al., (2007). The results of their study concluded that physical threat messages receive greater attention than social threat messages, but that female college students tend to be greater influenced by physical threat than social threat as females are perceived to prefer emotional appeals. Thus, the results from the focus groups suggest that female college students felt that fear is a necessary emotion in reducing binge drinking and that physical threat appeals are the most effective intervention in invoking this fear. Appeals dealing with the issues of rape and sexual assault, in particular, need to be shown on Irish television if they want to reduce the levels of alcohol consumption and binge drinking in this country. These appeals need to be developed by an independent body that maybe could be funded through the Health Service Executive as both focus group participants and leading public health experts felt that MEAS was not in a position to be involved in their development due to their relationship with the alcohol industry.
Chapter 6

Recommendations and Conclusion
6.1 Recommendations

This thesis set out to investigate the role that social marketing can play in reducing binge drinking among female college students. As mentioned in the literature review and findings, Ireland has a culture that is immersed and revolves around the consumption of alcohol and this has led to a substantial increase in alcohol related harm in our society. Females no longer view this as a male only phenomenon and have succeeded in replicating this behaviour on a regular basis. Whilst attending college, this normative behaviour of consuming substantial or excessive amounts of alcohol becomes more regular and sustained. The majority of the participants in this study stated that they drink alcohol on a regular basis and see it as normative behaviour while attending college. They also view their current alcohol consumption as a rite of passage to adulthood and that their alcohol consumption will lessen once they attain more responsibilities in adult life. So how can social marketing reduce this regular occurrence of binge drinking among female college students? Recommendations will be discussed in the following paragraphs.

Social marketing messages need to contain images and statistics that will result in shock and awe amongst the target group - female college students. The advertisements which proved most effective amongst the participants in this study proved to be physical threat appeals which dealt with the serious issues of sexual assault and rape. Every advertisement shown to the participants dealing with these issues resulted in the necessary emotion needed to change a person’s behaviour - fear. It would therefore seem apparent that these types of physical threat appeals should be shown on Irish TV to highlight the potentially serious consequences of binge drinking as opposed to the current appeals which focus group participants admitted were “laughable” rather than being taken seriously. The possibility of developing real-life type advertisements surrounding this issue is one that should be analysed. Some focus group participants stated that if they saw an advertisement where it showed a woman describing how she had been raped or placed in danger of being sexually assaulted and the role that alcohol had played in this, it would really shock them and would make them more conscious of the level of
alcohol they were consuming while out socialising. They also referred to the use of real life incidents such as those used in the drink driving advertisements as very effective and felt policy makers could use similar methods in relation to tackling the binge drinking issue.

As stated, it became very clear from the focus groups that participants felt the need to be shocked and informed, especially in relation to the issues of sexual assault and rape. All participants agreed that there were no advertisements that dealt with these issues in the Irish media at present and that this needs to be examined by policy makers in the very near future. Participants believed that the advertisements currently being shown on Irish TV were totally ineffective and make no difference in terms of trying to reduce this country's overall alcohol consumption. Indeed, participants were so strong in their views on this, that they said that the advertisements were currently a "waste of money and time". College students often view such messages as hypocritical, especially when they conflict with common cultural behaviours. As a result, programmes and messages targeted at college students need to be realistic about the ineffectiveness of prohibition approaches and social threat appeals. Therefore, raising awareness about how to drink more safely rather than insisting on abstinence may be a better strategy for health promotion bodies to adopt. Leading public health expert, Professor Joseph Barry, also agreed that this approach is a feasible option at ultimately trying to reduce alcohol related harm in this country.

The findings revealed the contradictory role of the alcohol industry's involvement in alcohol awareness campaigns in Ireland, in particular Diageo and Heineken, necessitating that this issue needs to be re-evaluated if the Department of Health and Children wishes to reach its aim of trying to reduce alcohol consumption in this country down to the current EU average. As revealed in the focus groups, participants were unaware that the alcohol industry is funding these awareness campaigns at present but could now appreciate why the advertisements currently being used were so ineffective. Participants agreed that the alcohol industry was using these awareness campaigns as corporate social responsibility campaigns for their own benefit and felt they were being misled by bodies
such as the Mature Enjoyment of Alcohol in Society (MEAS). This is a major issue when it comes to tackling our alcohol crisis - should the alcohol industry be involved in social marketing efforts (as is currently the case) or should it be the function of the Department of Health and Children? This could be further examined by analysing the role of alcohol sponsorship and advertising in this country. Should all alcohol advertising be banned? Should alcohol sponsorship of sporting events and teams be discontinued? Again, these are issues which need to be addressed if we want to reduce alcohol related harm in Ireland.

Alcohol awareness campaigns used in Ireland are presently ineffective as demonstrated not only from the findings in this research but also from the increase in alcohol related harm as a result of an increase in our alcohol consumption as reported by Fitzgerald (2004). This is despite the promotion efforts of responsible drinking by the body that develops these awareness campaigns – MEAS. While MEAS conduct very effective work at informing people to drink within safe limits, they are however funded by the alcohol industry and so have to abide by certain guidelines as set out by the industry. Therefore, it is clear that these campaigns will never raise the awareness of public health issues or recommend people to reduce their alcohol consumption as effectively as an independent body. If this continues to remain the case, then there will be no change in the level of alcohol related harm in this country. Thus, it is necessary to allow a body such as the Health Service Executive to run these alcohol awareness campaigns which can target the real issues in relation to excessive alcohol consumption.

The main issue with regard to this proposal is obviously the funding that is required to run such campaigns. While conducting the interview with Professor Joe Barry, he highlighted that running these campaigns is incredibly expensive, especially in this harsh economic climate. He stated that the funding may be simply not available or else is totally inadequate compared to what the industry can spend on advertisement of their products. After all, the alcohol industry spends around €70 million on advertising a year while the health service spend less than €1 million on awareness campaigns. A total ban on alcohol advertising and sponsorship is a realistic option available to policy makers that
could succeed in this imbalance being eroded. An interesting recommendation made by Professor Joe Barry on this particular issue was that if the industry was spending €70 million on advertising, they could agree to give €35 million of this spend to the Health Service Executive to fund awareness campaigns. The likelihood of this happening is obviously very slim as the alcohol industry will state that they are already playing their role in promoting responsible drinking through the use of MEAS. Their shareholders may also have reservations about the impact of such a move on their own profits.

Health warnings on alcohol products are another option available to policy makers in an attempt to highlight the potential health consequences of consuming alcohol. Such health warnings are exhibited on all tobacco products for the past number of years and such an approach could prove to be successful if adopted in Ireland also. Professor Barry stated that there is legislation pending at present whereby there would be symbols of a pregnant woman and messages not to drink alcohol during pregnancy on non-draft alcohol products, such as bottles of beer, alcopops, wine, etc. Professor Barry was extremely confident that in the very near future that there will be health warnings on all alcohol products, such as those that are currently on all tobacco products. The most significant and key issue with regard to these types of warnings is will they reduce binge drinking among the target group of this particular study? From the literature review and focus groups conducted, it could be argued that this type of intervention would prove to be unsuccessful as the majority of the target group assume that nothing serious will happen to them as a result of binge drinking on a frequent basis. However, by raising awareness of these health issues, such as the recommendation that one should not drink alcohol while pregnant, it enables the person who is drinking an alcoholic product make an informed decision on whether or not to consume the product based on the health warnings provided.

As mentioned in the literature review, the cumulative effects of alcohol abuse generally result in more medical problems for women than for men (Rohsenow, 1998). There was a general lack of knowledge and awareness of the health related issues as a result of excess alcohol consumption among focus group participants and this is a cause for
concern. If there is no action taken by public health bodies in Ireland and if current trends continue, according to the Health Research Board, there will be significantly higher numbers of middle-aged women experiencing alcohol-related morbidity and at greater risk of premature mortality. For example, when it was mentioned that alcohol consumption can increase the incidence of breast cancer, there was a general lack of awareness amongst the focus group participants of this correlation. Therefore, female college students and quite possibly even adolescents should be made more aware of the health consequences of excessive alcohol consumption. This particular target group only concerned themselves with the short-term consequences as opposed to being aware of the potential long term implications of their drinking patterns. This lack of awareness and knowledge needs to be dealt with through the use of awareness campaigns aimed at this target group. One issue in particular which has become very prevalent in Irish society is the increasing incidence of suicide. When focus group participants were asked for the health issues associated with drinking, very few mentioned any mental issues and in particular depression suicide. This highlights again the general lack of awareness of the link between alcohol consumption and depression resulting in suicide.

As a result of conducting this study, it was found that the definition used for binge drinking in Ireland is not realistic or relatable. The main reason for this is due to our "wet environment" or our drinking culture. The norm in this country is to drink a lot and it is quite difficult for a young person in this culture not to consume alcohol from an early age. Leading public health expert Professor Patrick Wall commented that it is probably harder to abstain from alcohol in Ireland than any other country in the world. Participants in the focus groups could not relate to the official definition for binge drinking and felt that it was totally unrealistic. The term binge may encapsulate such a broad array of drinking behaviours and outcomes that students fail to identify specific behaviours to change (Wechsler and Isaacs, 1992). The general understanding of the term binge was that it resulted in consuming copious amounts of alcohol, vomiting as a result of drinking alcohol, suffering blackouts etc. A more realistic assumption would be not to call people binge drinkers, but rather heavy episodic drinkers, whereby they would consume substantial amounts of alcohol over a period of time and in episodes - an episode being a
night or a weekend. For example, participants in the focus groups could not see the logic in calling a person a binge drinker if they drank four alcoholic drinks in one sitting and were absolutely fine as a result of doing so. Therefore, there is a need to re-define what binge drinking is in this country to take account of our culture and a need to discontinue the word “binge” with its connotations. Focus group participants were slow to admit that they were binge drinkers simply because they did not know what the official definition was. When it was suggested to them that their pattern of drinking was more heavy episodic as opposed to binge, they freely admitted that they would classify themselves as heavy episodic drinkers as they recognised that they drink at levels well beyond the standard binge threshold and were able to relate better to it.

This recognition by focus group participants that they are heavy episodic drinkers as opposed to binge drinkers could be used by policy makers when instigating new awareness campaigns. Heavy drinking is thought to be a problem of expectations of fun (Wood et al., 2001). Students may increase their alcohol consumption if they attribute fun experiences to the number of drinks rather than the increased time spent in the social setting. By emphasising that people experience more fun when they increase the time spent in a social situation rather than increasing the amount of alcohol consumed, it may be possible to highlight to students the positive aspects of drinking less and negative aspects of drinking to excess. Interventions that focus on increased awareness of positive outcomes may improve expectations for light to moderate drinking amongst college students. There is a lack of advertisements promoting the positive aspects of drinking less alcohol in a controlled manner in Ireland at present. The only advertisement that could be found to stress this aspect for the purposes of this study was the *Trish Hen Do* advertisement which was produced in Australia. When focus group participants were asked for their opinions on these types of advertisements, they agreed that they always enjoy their nights better when they only have a couple of drinks and are drinking in a controlled manner. Therefore, this would suggest that this type of appeal and framing of the message in a positive way would prove very beneficial in potentially reducing binge drinking among this target group.
Participants in the focus groups expressed an over reliance on some coping strategies. There was constant referral to the role that friends play in ensuring their safety on nights out and the setting of limits so that “they will not get too bad”. However, some participants were still able to give accounts of incidences where they had totally blacked out from consuming too much alcohol, highlighting participants’ perceived invulnerability to the consequences of excessive drinking. The notion that “it won’t happen to me” was expressed on a number of occasions. Some participants admitted that they were in less control once they had consumed alcohol while others refused to contemplate that they were more susceptible to experience negative consequences as a result of excessive alcohol consumption. It was not until viewing some of the physical threat appeals that participants realised that some negative consequences could indeed happen to them, while again other more high sensation-seeking participants dismissed the appeals and still felt that they were in control. These particular participants over-exaggerated their ability to control their drinking. In relation to the participants who did view the physical threat appeals as effective, it highlights the potential impact that physical threat appeals can have on reducing binge drinking among female college students. These appeals raised awareness among participants in this study of the potential negative consequences of excessive alcohol consumption by exposing the “I am the exception to the rule” mentality as flawed and did create a sense that one of these consequences could indeed happen to a participant or to someone they knew who did binge drink excessively.

While this study sought to reduce binge drinking among female college students, the task faced by policy makers is to reduce overall alcohol consumption and related alcohol harm in this country. This task has been made all the more difficult in recent years due to an increase in the number of alcohol outlets in the off-trade sector (off-licences, supermarkets) selling alcohol in Ireland. The abolition of the Groceries Order by the then Minister for Enterprise, Trade and Employment, Micheál Martin in 2006, has also resulted in the price of alcohol products in the off-trade sector falling significantly in the last couple of years. Since the abolition of the Groceries Order, there have been constant price wars between the major supermarkets over the price of alcohol products in an
attempt to gain market share. This growth in the off-trade sector due mainly to the decrease in the price of alcohol has resulted in a new pattern of drinking emerging among the younger generations in our society. It has been recognised that people aged 18-30, drink frequently in a home setting before socialising in pubs and clubs with the main reason being down to the price of alcohol. This is especially relevant for college students who would have a limited disposable income and so are more likely to drink alcohol at home before socialising in pubs and clubs. This price factor was especially prevalent in focus group discussions, with participants detailing how they nearly always drink cheap alcohol products at home before going to a pub or club, simply because it is cheaper to do so. Focus group participants also detailed how they would bring alcohol in the form of naggings of spirits (mainly vodka) into a pub or club with them as they felt that the price of alcohol in bars was too expensive. Recent legislation has been drafted by policy makers to reduce the hours that the off-trade can legally sell alcohol with the impact currently being assessed. This legislation illustrates that there are attempts being made to reduce alcohol consumption levels in Ireland with more legislation pending with regard to further measures being introduced in the coming years.

The majority of the recommendations discussed above are aimed directly at policy makers and can only be potentially implemented by these policy makers in the future. However, colleges in Ireland can also play a role in attempting to reduce binge drinking among their vast student populations. With age, young adults become increasingly aware of the potential benefits of drinking alcohol and become less convinced of costs or risks (Maggs and Schulenberg, 1998; Johnson and Johnson, 1996). This is especially relevant for college students who view their college experience as a rite of passage to adulthood and so are willing to spend a proportion of their college life drinking alcohol due to its social benefits without significant consideration on its effects on their academic performance. Therefore, some consideration should be given to the scheduling of class times at third level institutions in Ireland. Thursday night is traditionally a night for students to socialise and thus as a result the majority of students rarely attend classes on Friday mornings and hence classes are not scheduled at these times as a result. In a study by Wood et al., (2005), they found that students who have early classes on Friday
mornings drink significantly less on Thursday nights than students with later or no class times. This was also observed in the focus group discussions with some participants admitting that having an important class on a Friday morning would result in them staying in on a Thursday night or drinking less if they are out socialising. Increasing mandatory class time or scheduling important classes on Friday mornings would reduce students’ leisure time and might increase the real price of drinking by making it more difficult to drink heavily without infringing upon academic demands. These results are consistent with the findings of Murphy et al., (2007) who also found that students who had to attend mandatory classes on a Friday morning drank less or abstained from alcohol on a Thursday night. Colleges should also be more proactive at raising awareness of the potential negative consequences of excessive alcohol consumption during Freshers’ Week and Rag Week. These two weeks are by tradition drink-fuelled weeks where students consume dangerous amounts of alcohol in a short space of time. The responsibility to raise this awareness may lie with the respective students unions within each college across the country.

6.2 Conclusion

This study has recognised that Ireland and Irish people have a very strong cultural and social link with the use of alcohol. Irish people per capita are among the highest consumers of alcohol in the world. This heavy consumption of alcohol has been finally recognised as Ireland’s most significant drug crisis.

As stated in this study, it has become more socially acceptable for women to consume alcohol in greater volumes and in patterns mirroring that of their male counterparts. This study attempted to highlight the extent of binge drinking among third level female students in one third level college in Ireland. Although this target group may be justifiably perceived as a minority within our society, the statement by the Health Research Board in 2007 is chilling. They stated that if current trends continue, there will be significantly higher numbers of middle-aged women experiencing alcohol-related morbidity or at greater risk of premature mortality. If this proves to be the case, it is this
particular target group who will be predominantly affected. Therefore, the timing of this research is quite significant in seeking to reduce overall alcohol-related harm in Ireland.

This research set out to investigate the application of social marketing as a mechanism to reduce binge drinking among female college students but may also be potentially adopted as a means of attempting to reduce this country's excessive alcohol consumption levels on a more general basis.

In order to combat the alcohol related harm that is currently being experienced in Ireland, there needs to be a new approach adopted by policy makers. As mentioned in the recommendations, this should comprise the establishment of an independent body to oversee the development of public service announcements that are not subject to interference from the alcohol industry. These public service announcements should be physical threat appeals as this study has highlighted that these were the most effective at potentially initiating behaviour change among this target group. Furthermore, policy makers may ultimately need to consider the banning of all alcohol advertising and sponsorship and call for the industry to substantially increase contributions to fund these independently developed campaigns. Such measures would prove to be very controversial amongst various stakeholders but may well result in a substantial reduction in alcohol related harm in this country. What is needed is a change in our cultural perception of the use of alcohol with the onus on the Government to take a stronger role in relation to overall health promotion in Ireland.

Overall, according to the findings and extensive literature review conducted for the purposes of this research, this study concludes that the use of physical threat appeals is the most feasible and realistic option in reducing binge drinking among female college students. Physical fear was consistently found to be an effective approach amongst this target group for potentially changing their behaviour and reducing their alcohol consumption and propensity to binge drink regularly. The use of issues such as sexual assault and rape should be considered in these appeals as they proved very effective at initiating potential behaviour change among female college students who participated in this research.
6.3 Potential for Future Research

This study investigated the role that social marketing can play in ultimately trying to reduce binge drinking among female college students. While conducting this research, it became apparent to the researcher that there is potential for future research on a number of different issues that were raised in both the literature review and primary research conducted.

The area of harm reduction rather than abstinence was seen as an area that warrants further research. The main principle of a harm reduction approach is a pragmatic and compassionate view that some use of alcohol is a common feature of human experience and that the reduction of use may be a more realistic option than insistence on abstinence (Riley et al., 1999). By adopting a harm reduction approach, it acknowledges that most adolescents and young adults will drink alcohol. Therefore, supporting less harmful drinking behaviour may be a means for providing education on how to drink more safely thus preventing heavy consumption without provoking a rebellious response from the target group.

While this study focused on the use of social marketing to reduce binge drinking through the use of public service announcements, another approach that could be investigated further is the use of social norms marketing campaigns. Social norms marketing campaigns are used to raise awareness about binge drinking and its potential negative effects. These have been pre-dominantly used in the US in the past and have proven to be successful in highlighting the disparity that exists between actual and perceived drinking norms in college environments. These campaigns focus on college students who tend to overestimate how many of their peers engage in dangerous alcohol consumption. These campaigns incorporate publicity events, student newspapers and magazines, posters and email messages. In one focus group conducted, some of the participants mentioned that if there was more awareness raised about issues like rape and its association with binge drinking through the use of poster campaigns, articles in student magazines, etc. then it could possibly lead to them reducing their alcohol consumption.
As mentioned, it is an approach that has worked successfully in the US and it may warrant further research to see if such an approach would be feasible and effective in reducing binge drinking among college students in Ireland.

It became apparent from focus group discussions that this particular target group had very little knowledge of the mental health issues associated with drinking alcohol. Research has estimated that alcohol abuse or dependence may account for between 15% and 24% of completed suicides (Gorwood, 2001). Suicide has been identified as the leading cause of death in Irish men in the 15-34 year age group (Mongan et al., 2007). This startling statistic highlights the need for more awareness to be raised on this issue in Ireland. Further research in this area could lead to the development of appropriate awareness campaigns that could highlight the positive association between heavy alcohol consumption and suicide.
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Appendix 1 – Focus Group Interview Guide

**General Questions**

- How many of you drink?
- At what age did you start drinking?
- How much would you drink on a typical night out?
- What type of alcohol do you drink?
- Why did you start drinking?
- What do you feel are the main reasons as to why you started drinking?
- Does anyone know the official definition for binge drinking?
- If not, what is binge drinking for you?
- Would you classify yourself as a binge drinker?
- Do a lot of your friends binge drink?
- Is there approval of heavy drinking amongst your peers?
- Where does the majority of your drinking take place?
- When you drink before you go out, what time do you start?
- Is price a major issue when it comes to determining how much you consume?
- What are the health effects of drinking alcohol?
- Would your knowledge of these effects be limited?
- Does anyone alternate their drink with a soft drink or water?
- Does work or study affect your drinking?
- Does anyone have a limit?
- Have you ever got so drunk that you can’t remember the night out?
- Would this occur regularly?
- Do you think you over exaggerate how much you can deal with alcohol?
- Do you rely too much on your friends when out socialising?

As the questions were being asked, each focus group differed in terms of the structural flow of the questions as some of the participants had more to contribute on a particular aspect in every focus group conducted.
Questions in relation to Physical Threat Appeals

- Of all the ads we have showed, which do you feel is the most effective? Why?
- Could that be you?
- Has this every happened to you or anyone you know?
- After viewing the potential consequences of binge drinking, would they encourage you to drink less alcohol/ stop drinking alcohol?
- What is effective/ineffective about the ad to make it convincing/unconvincing?
- In relation to the sexual assault and rape issues, did they shock you?
- Do you feel those type of ads should be shown on Irish TV?

Questions in relation to Social Threat Appeals

- What are your views on those type ads?
- Can you relate to them?
- Can you see yourself in that situation?
- What do you think of the characters in those ads?
- What have those ads done for you?
- Is the message clear and thought provoking?
- Which scenario would you rather be in? (Not drinking to excess or drinking to excess).
- Has it highlighted the benefits of not drinking excessively?
- Do you think these types of ads are effective?

Round-up Questions

- Which ads did you find most effective, physical or social?
- Any particular ad really stand out for you?
- Should more physical type ads be shown on Irish TV?
- Would they encourage you to change your drinking habits?
Appendix 2 – Interview Guidelines

Two semi-structured interviews were conducted with leading public health experts Professor Joseph Barry (Trinity College Dublin) and Professor Patrick Wall (University College Dublin).

Questions for Interviews

- What should social marketing messages contain in order for them to be more effective?
- Are alcohol industry sponsored PSAs less effective than independent PSAs, for example from the HSE?
- What is your opinion on body’s like MEAS who promote responsible drinking yet are controlled by the industry?
- In relation to harm reduction approaches, do you think they would be more beneficial as opposed to adopting a zero tolerance approach?
- Should there be more awareness made of the health consequences of excessive alcohol consumption?
- Do you think the definition for binge drinking is realistic? Is there scope to broadening it?
- Do you think there will ever be a behavioural shift in terms of our overall view of alcohol consumption as a normative behaviour in our society?
- There is very little empirical evidence that alcohol advertising has any effect on alcohol consumption, what are your views on this assumption?
- Do you feel there should be more stringent controls put in place with regard to alcohol ads?
- Do you think the Irish government should take a more proactive approach in reducing the amount of alcohol advertising and sponsorship?
- Do you think social marketing messages should depict more physical threats as opposed to social threats that are currently used?
- Are you aware of any international interventions that have been successful in terms of reducing alcohol consumption?