

A Good Night Out: Alcohol-related Behaviours in Young Adults

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Abstract

Purpose – The purpose of this paper is to investigate drinking patterns; attitudes towards alcohol consumption and alcohol related behaviours amongst differing groups of young adults. A further aim is to investigate whether the drinking behaviours of undergraduate populations can be considered to be representative of young adult behaviours in general.

Design/methodology/ approach – Four groups of young adult alcohol consumers were identified. The participants in the first two groups were aged between 18 and 23, one group being undergraduates and the second non-graduates in work. Participants in the second two groups were aged between 24 and 29, one group comprising graduates in work, the second non-graduates in work. 120 questionnaires were completed; thirty in each sample group, with an even gender distribution. Follow up one-to-one interviews were carried out with representatives from each group.

Findings – Although a small study it is evident that whilst there are some similarities in behaviours between the differing sample groups significant differences in alcohol related behaviours dominate.

Practical Implications – The results suggest that utilising the results of research carried out amongst student populations to inform government policies with regard to the behaviour of young adults in general is unlikely to be successful in changing drinking behaviours.

Originality value – This paper produces new insights into current drinking cultures and attitudes towards drinking in differing groups of young adults. Specifically it compares behavioural norms between graduate and non-graduate populations challenging much current research which is based upon student samples as being representative of the young adult population as a whole.

Keywords – Young Adults, Graduate, Drinking Cultures, Social Drinking, Alcohol-related Behaviours, Pre-loading

Paper type – Research paper

Introduction

The moderate consumption of alcohol is an accepted facilitator of social situations relaxing some

inhibitions and encouraging feelings of sociability and well being (Park and Grant, 2005). There is also much current research to show that moderate consumption of alcohol, wine in particular, can have positive health benefits (Stuttaford, 1997; Di Castelnuovo *et al*, 2006; Mukamal *et al*, 2006). However Government and medical bodies such as the Royal College of Physicians have become increasingly worried that those who participate in a UK 'binge drinking' culture of immoderate alcohol consumption are creating a rise in alcohol-related harms; e.g. increasing instances of chronic conditions such as cirrhosis of the liver being found in increasingly younger populations. In 2004 alcohol related misuse was estimated to cost the health service between £1.4 and £1.7 billion per year (NHS, 2007).

As this paper discusses, the notion of binge drinking itself is complex. Media presentation, which brings issues to public attention, is always a particular construct of reality (Louw, 2001). Public representation of alcohol related behaviours is predicated upon social constructions of government aligned to contemporary public attitudes (Berridge *et al*, 2007). Home Office Research (2005) shows that the group of adults who drink the most heavily is the 18 – 24 year old group and within that population 49% of males and 39% of females can be considered to be binge drinkers. Additionally, much academic research such as Maguire and Nettleton (2003) and Matthews *et al* (2006) shows that the social group which is most likely to suffer alcohol related violent injury is young adults between 18 and 30 and predominantly male.

The Government's concern re alcohol related harm is demonstrated both by the introduction of the Licensing Act 2003 and in the Alcohol Harm Reduction Strategy for England, 2004 (AHRSE). These policies were both intended to help initiate change the UK drinking culture away from binge drinking into what is perceived to be the more social, safer European Café culture. This issue is still being developed by the government (see HM Government 2007) and starting to be endorsed by the drinks industry as a whole, particularly by those involved in marketing alcohol (Burkitt, 2007).

Much of the research into alcohol related behaviours amongst young adults has been carried out within student populations (Graham and Wells, 2003; O'Donnell *et al*, 2006; Hassan and Shiu, 2007). This is probably because their profile fits the most significant sample population profile, young (male) and single, and there is ease of access. This paper suggests that whilst the student population's interaction with alcohol does seem to be fairly homogeneous in its international profile (Graham and Wells, 2003; Kuntsche *et al*, 2006) the culture of student life is not the same as for others in the same age group, i.e. non-graduate workers. The paper also suggests that results from student based research are time specific: immediately students graduate and become employees, work based norms impact upon their lives. In addition non-graduates typically earn less than those who have graduated (Elias and Purcell, 2004; O'Leary and Sloane 2006) and come from less affluent backgrounds. However, as both Forsyth *et al* (2007) and Foster *et al* (2007) show, since the introduction of the Licensing Act 2003 one unexpected result has been the increase in licensed premises in disadvantaged economic areas. This is at a time when pubs in mixed or advantaged areas are either closing or making an increasing percentage of their profit from food rather than drink sales.

The concept of this particular paper arose because the experiential observations of the authors led them to believe that there may well be significant differences in attitude towards, and the drinking

cultural norms of differing groups of young adults. Therefore the propensity to use student groups as sample populations may well be creating theories about drinking cultures which only have resonance for certain groups. The rationale for the paper was further informed by the fact that most current research is associated with on-trade consumption of alcohol when increasing amounts of alcohol are actually purchased in the off-trade (DEFRA, 2005). As Forsyth (2006) and Forsyth *et al* (2007) point out this lack of research is particularly surprising given the propensity for many young people to pre- or front[1] load their evenings' alcohol consumption with drink bought in the off-trade.

The aim of this paper is to specifically investigate graduate and non-graduate populations to establish if there are attitudinal, cultural or behavioural alcohol related differences between the groups. If behavioural differences are identified by this research this would have significant implications for the results of previous studies based upon students populations and currently used as models of consumer behaviour across other young adult populations.

The literature review will show that there is little consensus as to the causes of anti-social drink related behaviours, although distinct gender differences can be identified both in behaviours and alcohol related harm. It will also show that there is confusion about what constitutes heavy or binge drinking and therefore potential difficulty in maintaining moderate alcohol consumption. The paper then reviews the wide range of places in which drinking may take place on a single night out highlighting the fact that both off and on-trade venues are usually involved. Finally the importance of image in public consumption will be discussed and its impact upon perceptions of acceptable behaviour.

The methodology will identify the data collection methods used in this research project. The results and discussion will analyse the findings reflecting back to the literature review. The paper will conclude with strong recommendations for reflection upon the validity of some current research results and areas for further research.

Literature Review

Arising from the societal concerns previously noted much has been written about the harmful effects of excessive alcohol consumption. In particular in terms of those who consume excess alcohol (Room *et al*, 2005), the damage that they may do to others (Matthews *et al*, 2006) and the cost of that damage to the UK in general (AHRSE, 2004). Much less has been written about the social context and, as Matthews *et al* (2006) and Hassan and Shiu (2007) point out, there is still little research and consensus as to the causes of excessive anti-social drinking behaviour in certain groups of people. For example, Russell and Arms (1995) suggested that individuals drinking at sporting events moderated their behaviour, becoming less aggressive, if that was the expected cultural norm. Conversely Matthews *et al* (2006) showed that national sporting events were likely to increase alcohol related male violent injury. Agreeing with Russell and Arms (1995), Graham and Wells (2003) also show that the social context of the drinking occasion and the cultural norms of the group have a significant effect upon whether or not the drinker may become aggressive. Cable and Sacker (2007) and Smith and Foxcroft (2007) show how adult interaction with alcohol is related to drinking cultures and expectations learned in adolescence.

Gender Differences in Drinking Behaviour

Historically women have been the calming voice of abstinence in matters of alcohol consumption; however Rocha-silva suggests that

gone are the days when young girls used to cook like their mothers, nowadays they drink like their fathers

(Rocha-Silva (1997), cited in Plant, 1997, pp5)

As Berridge *et al* (2007) discuss, societal worry about excessive or harmful alcohol consumption is periodic and usually related to other social anxieties. It comes to the fore as a tangible expression of that anxiety; for example in the 18th century relating to industrialisation. Today the particular social disapproval of women drinking or being perceived to drink to excess in public can be related to worries by some social groups about loss of control and power. Makela *et al* (2006) suggest that women's rates of drinking are linked to status within society, the higher the status the smaller the gender consumption differences.

This ability of women to demonstrate independence by aping the public drinking behaviour of their male peers, the development of the ladette, might be seen as positive, although as Berridge *et al* (2007) show the ladette is not a new phenomena. However, negatively there is much medical evidence (Stuttaford, 1997: Makela *et al*, 2006) to show that women are affected differently, more severely, at a younger age by less alcohol than men. This is a particular concern of the medical profession. However, in spite of media coverage indicating a contrary picture, e.g. Daily Mail head line "Rise of the Girl Drunks", Goddard (2006) and NHS (2007) show that, independence having been demonstrated, low risk drinking behaviour amongst women in the UK is on the rise: heavy drinking in young women peaked at 28% in 1998 but fell in steadily to 20% by 2005. This supports the work of Hassan and Shiu (2007) who show that women are much more likely to plan and stick to low-risk single occasion drinking (LRSOD) behaviours than men. A significant factor in this, as Malela *et al* (2006) show is having a partner, and particularly having a child, which significantly reduces risky behaviour in women overall.

Binge or Heavy Drinking and How do We Know?

In 1976 drink driving regulations were enforced in the UK creating the need to definitively establish units of alcohol. One unit of alcohol was defined as 8 grams or 10 millilitres of alcohol. In 1976 Marrison was able to write authoritatively in the third edition of his book that;

in the ordinary way grape juice will not contain more than enough sugar to give 11 or 12 per cent of alcohol; 10 is a good average in Europe, and much wine is sold at 7 per cent.

(Marrison, 1976, pp 61)

Since then however as a result of advances in technology and the impact of global warming in some areas the average percentage of alcohol by volume (abv) in wine is now around 12% with many wines reaching 14% or more. For ease of reference the British Institute of Innkeeping (BII) (2007) describes a unit as;

- *Half a pint of beer of 3.6% abv...*
- *One 25ml measure of whisky [spirit] of 40% abv*

(BII, 2007, pp 63)

The BII no longer use the term 'a small glass of wine' to represent one unit because, as they point out, legally wine can vary from 8% abv to 16% abv and, at 12% abv, one 125 ml glass of wine would contain 1.5 units (BII, 2007, pp84). A similar increase in alcohol levels can be seen in

beers and lagers, particularly with the move from cask strength to premium strength products, although some spirits have reduced their abv over this period to change tax banding: for example, Gordons Gin and Smirnoff Vodka.

The metrication of drinks measures via the Weights and Measures Act 1985 further added to the potential for confusion since it enabled the 'single measure' for the sale of wines and spirits to be increased. Many pubs and restaurants, for example, use the 175 ml measure for their standard glass of wine rather than 125 ml, and many city late night venues use 35ml as their standard spirit measure rather than 25ml.

The Health Education Authority recommends that men should consume no more than 21 and women no more than 14 units of alcohol per week. In 1995, in recognition of the specific risks of excessive drinking in a single session, the sensible drinking message was changed to focus on daily guidelines; these suggest a maximum intake of 2-3 units per day for women and 3-4 for men, with two alcohol-free days after heavy drinking (Health Education Authority, 1996). However, Berridge *et al* (2007) illustrate the differences in the way that differing government bodies review and interpret data related to the number of units consumed. Table 1 shows how wide the range of alcohol strengths can now be suggesting that even those adults who 'know' what a unit of alcohol is, i.e. half a pint of beer, a single spirit or one glass of wine and actively try to moderate their drinking may not have enough information to be able to do so.

Insert Table 1

Berridge *et al* (2007) also point out that even the term 'binge drinking', whilst being a great sound bite, is meaningless in many contexts as it has different definitions for differing groups. Home Office Research (2005) uses the term binge drinking to describe those '*who felt very drunk at least once a month*'. Alcohol Concern (2007) suggests that it is drinking sufficient alcohol to reach a state of intoxication in one session. However both these definitions are perceptions of drunkenness rather than actual levels of alcohol consumption. Other definitions include 'single occurrence heavy episode drinking' (SOHED), i.e. repeatedly going out with the intention of getting drunk. This then raises the issue of when drinking becomes binge drinking and to whom since NHS (2007) shows that although in 2006 69% of adults had heard that there were recommended drinking guidelines, a third of them did not know what the units were.

Given all of these issues Hassan and Shiu (2007) suggest that identifying LRSOD and SOHED behaviours is in fact a more productive method of identifying dangerous and non-dangerous drinking behaviours than looking at number of drinks/ alcohol consumed *per se*.

Where Does Drinking Take Place?

To date much government emphasis has been placed upon making the on-trade premises, particularly bars and late night entertainment venues, and their environments safer. This has been done by Home Office via initiatives such as TASC (Targeting Alcohol Related Street Crime, Maguire and Nettleton (2003)) and the introduction of legislation such as the Licensing Act 2003 and Private Security Industry Act 2001. At a local level this safe emphasis is evidenced by policies such the introduction of plastic glass in particular venues (Forsyth, 2006; Forsyth *et al*, 2007). However per capita consumption of alcohol in people over 16 has risen from 9.4 litres per

annum in 1993/4 to 11.4 litres in 2005 /6 whilst relative expenditure on alcohol per household has fallen, from 7.5% of the domestic budget in 1980 to 5.2% in 2006. (NHS, 2007). Mintel (2007) shows an increasing trend towards home consumption; in 2006 47.4% of consumers agreed that most of their drinking was done in the home, a 9.2% increase from 1996. One reason for this is the use of below-cost alcohol promotions by supermarket chains as part of their effort to gain market share (Thompson, 2003; Mintel, 2007). It is therefore significantly cheaper to buy alcohol in the off-trade rather than the on-trade. Key Note Ltd (2006) shows that the average price of a bottle of wine was £4.00 off-trade and £15.00 on-trade.

As Forsyth (2006) and Galloway *et al* (2007) show many young adults pre or front load their drinking. This means that they buy drink from retail outlets and consume it before going to the pub or club. The reasons for this can vary: the young adults may want to drink with younger friends, certainly for an earlier part of the evening; if it is a nice day young people may prefer to drink in an unrestricted place where they can play football and drink or 'chill' as they choose (Galloway *et al*, 2007). There is also the aspect of meeting up at friends' houses before going out when 'social preloading' (Forsyth, 2006) often takes place. Social preloading may just be having a drink with friends whilst catching up in a quiet environment. Upon other occasions social preloading may intentionally or unintentionally include heavy drinking.

Anecdotally the authors are aware of two current practices in Cardiff which reflect Forsyth (2006) and Galloway *et al's* (2007) work. One activity is 'yarding' a bottle of wine just prior to going out. This is the activity of drinking a bottle of wine in one go; similar to the traditional activity of downing a yard of ale in a pub. Yarding helps to increase the 'party spirit' before going out. The second activity, conversely, is to increase personal safety; young adults drink at home, cheap but safe, 'known' alcohol, and then drink one alcoholic or just soft drinks for the rest of the evening, particularly in nightclubs.

All of this off-trade style drinking is much cheaper than it would be in the on-trade therefore, particularly amongst those on low incomes, it makes sense to drink before going out. Forsyth (2006) and Galloway *et al* (2007) also show that after pre-loading young adults often drink in pubs or bars before going to a nightclub as drinks prices increase proportionally. Berridge *et al* (2007) confirm that young people drink in a variety of ways in a single night out and discuss the point that most research assumes a mono-drinking culture in young people. Ritchie (2006) and Forsyth (2007) show that consumers in nightclubs may well opt for small strong drinks because they can be drunk in one go, or bottled drinks. Both activities also reduced the potential for spillage and neither need to be left unattended between dances with the potential dangers that can bring.

Image and Public Drinking

Galloway *et al*, (2007) and Ritchie (2007) show that what you drink must reflect who you are. More precisely, since people change the product they drink to suit the specific situation (Demossier, 2004; Ritchie, 2006) what is drunk in each situation must reflect the image that the consumer wants to portray in that situation. Demossier (2004) and Ritchie (2006) show that adults who prefer beer may consume wine when dining in restaurants. Conversely beer may be chosen in pubs by predominantly wine drinkers: for example significant peer pressure may be felt to conform in a group of male drinkers in a 'real ale' pub. Galloway *et al* (2007) and Ritchie (2006)

also show that place and type of purchase can be equally important for off-trade purchases. Since young adults are often very image conscious this may be one reason why Forsyth (2006), Berridge *et al* (2007) and Galloway *et al* (2007) identified varied drinking patterns amongst young adults.

All three papers also identified the “theatre of public consumption” utilised by young adults. Other authors have looked at the “theatre of the hospitality experience” from both the customer (Lugosi, 2007) and staff perspective (Sandiford and Seymour, 2006). Forsyth (2006), Berridge *et al* (2007) and Galloway *et al* (2007) show that there is a carnivalesque rowdiness associated with young adults during a night out that is not necessarily directly related to alcohol consumption. It can be seen as a public demonstration of enjoyment. This rowdy behaviour does not have to take place in a noisy environment, hence the ‘nuisance’ of groups of young people meeting up in public spaces. The question then arises that, if this exuberant behaviour is not necessarily based upon alcohol consumption, is it being informed by images of bad behaviour in the press being seen as the expected norm behaviour within that age group, as Louw (2001) and Berridge *et al* (2007) suggest?

Forsyth (2006) suggests that the violence that can erupt in night clubs is more associated with noise, dance and general exuberance than it is with alcohol *per se*. Graham and Wells (2003), however, suggest that there are groups of, mainly, young men for whom one aspect of the theatre of a good night out is to have a fight, which does not lead to hospital or incarceration, and which can then provide entertaining material for subsequent ‘war stories’. They suggest that some of those involved in deliberately provoking violence are purposely fuelled up for the occasion. Others, in generally non-aggressive mode, become almost accidentally involved by the perceived need to save face or save a friend. In addition, Hunt *et al* (2005) suggest that in the male psyche the amount of alcohol consumed is directly proportional to the drinker’s perceived masculinity: being seen to ‘be a man’ can be more important than the potential consequences.

Overall, Skinner *et al* (2005) suggest that what women want on a good night out from bars and night clubs is a safe female friendly environment. What men, particularly young single men, usually want is a safe environment in which there are plenty of women present.

Methodology.

The purpose of this paper is to specifically investigate graduate and non-graduate populations to establish if there are attitudinal, cultural or behavioural differences between the groups. It was therefore very important to identify graduate and non-graduate sample populations and then maintain a balance in the number of respondents.

It was decided to base the primary research in Cardiff, the capital city of Wales. Cardiff was deemed to be a suitable site for the research for pragmatic reasons (Patton, 2002; Somekh and Lewin 2005). All the authors are based in Cardiff. There are four universities, University of Wales Institute Cardiff, Cardiff University (including the Heath Hospital), Lampeter (Theology) and Glamorgan University based in and around the city to provide a robust and diverse student population; students form around 25% of the adult population of Cardiff.. Many large employers are based in and around Cardiff, such as the Welsh Assembly, BBC Wales, HBOS, British Telecom and British Gas with the potential therefore to provide a suitable range of

young employed respondents.

Development of the Research Process

It was decided to use questionnaires as the main data collection source because they are a useful source of quantitative data collection. Whilst questionnaires have limitations many of these can be overcome by careful planning and rigorous piloting. Denscombe (2005) suggests that conducting self-administered questionnaires can result in a lower response rate than face-to-face questionnaires; this can be overcome by pre-selection of participants, gaining their permission and approval for participation before the questionnaire is delivered. This method also allows required quotas to be met. The advantages of using self-administered questionnaires over face-to-face questionnaires are economy, speed, lack of interviewer bias, and privacy to encourage more candid responses on sensitive issues (Babbie, 1998). Alcohol consumption can be a sensitive issue to some. Using self-administered questionnaires allows the respondent a degree of anonymity which Clarke (1999) suggests may be advantageous '*if dealing with ethically or politically sensitive issues*' (Clarke, 1999, p72).

The use of closed questions over open questions allows each participant to answer each question in a manner which can be compared with all other participants. This method reduces subjectivity, eliciting the same data from all respondents; providing uniformity of responses as well as simpler analysis of the data (Foddy, 1993; Babbie, 1998). The limitation of using predominately closed questions is that pre-set responses can prevent the respondent from qualifying their response, thereby giving answers they would not have otherwise given had more open based alternatives been available. In this research the use of self-administered questionnaires was off-set by a second set of data collection which utilised semi-structured interviews to qualitatively investigate respondents' perceptions and beliefs.

If used correctly quantitative and qualitative methods of data collection can complement each other and give a validity to the end results which is not otherwise obtainable. Corbetta (2003) recognised the radical differences in approach of both methods to social research but shows that they are complementary.

The Research Process

The research was undertaken during the winter and spring of 2007 and 2008. Both quantitative and qualitative research was undertaken. The quantitative research took the form of self-administered questionnaires. The questionnaires were issued to four differing groups of young people, deliberately chosen to have differing social networks; due to level of education, employment commitments and disposable income. The four target groups were identified as:

- Group 1) 18 – 23 year olds currently studying an undergraduate degree
- Group 2) 18 – 23 year olds never studied in Higher Education (non-graduates) and working
- Group 3) 24 – 29 year olds graduated and now working
- Group 4) 24 – 29 year olds never studied in Higher Education (non-graduates) and working

Whilst accepting that alcohol consumption habits do not change overnight the six year age band is sufficient to enable distinct patterns of behaviour to be established. As discussed in the literature review 18 to 30 is a commonly used statistical age banding, e.g. Home Office Research (2005).

One hundred and fifty six questionnaires were issued until the target sample had been reached,

that is thirty respondents in each group including a balanced of male and female respondents. Following analysis of this initial data using SPSS eight semi-structures interviews were carried out to explore the issues raised by the self administered questionnaires. There were two interviewees from each of the target groups, one male and one female.

The thirty six questionnaires not used in this sample were started / completed by people who were excluded from this study because of particular behaviours identified that were likely to significantly influence their interaction with alcohol. Respondents questionnaires were excluded from the study if:

- they did not drink alcohol;
- they classed themselves as unemployed;
- they were pregnant, since most pregnant women moderate their alcohol consumption behaviour during pregnancy;
- they had children living at home under the age of 14. Parents are likely to moderate alcohol intake if young children are present within the family home (Malela *et al*, 2006).

Whilst information from young adults falling into these categories can provide valuable information about alcohol consumption behaviours in order to look at drinking related behaviour across a homogeneous group it was necessary to exclude those who did not fit a basic student profile, young, with an acknowledged 'work' commitment and without children.

Non-probability sampling, using a purposive sampling system (Denscombe, 2005), was used for the quantitative research; administration of the self-administered questionnaire. The authors identified suitable venues where it was likely members of each of the four study groups would be located, such as university refectories, student union bars and large employers within the Cardiff city boundary. Utilising this method it was possible to establish in advance that the potential respondents matched the research profile identified. It was then relatively simple to meet quota needed for each group. Whilst purposive sampling has the potential to introduce bias, for the purpose of this research it was essential that there was balance between the four target populations: working for the same, large, company or studying in the same university was not considered to compromise the validity of the results obtained.

Each questionnaire was coded enabling restricted identification of the group and name of the respondent. These details were required for possible inclusion in the qualitative data collection section of the research. In the questionnaire the respondents were asked what they drank, where and how many. They were also asked how alcohol consumption had affected their behaviour. The questions asked are included in appendix 1. Unit intake was calculated by the research team using Alcohol Focus Scotland's (2007) calculation; multiply the amount drunk in millilitres by the percentage abv and divide by 1,000. Following on from NHS's (2007) results it was believed that this would give a more accurate reflection of alcohol consumed rather than asking participants about their perception of units consumed.

The semi-structured interviews enabled reference to be made back to the participant's previous self-administered questionnaire. This cross referencing allowed for the information gained during the quantitative data collection to be explored in greater depth giving greater validity to participants responses. Confidentiality and anonymity were maintained throughout the research process.

Analysis of the results shows that whilst group one, the students, displayed some behaviours that were similar to behaviours identified in the other three groups they also displayed significantly different behaviours as well. Gender similarities and differences were also identified in all groups. After an initial analysis, out of curiosity, the two older aged groups were broken down into smaller groups, 24 to 26 and 26 to 29. Whilst it is accepted that this has made these older group sizes very small overall the results are qualitatively the same via either analysis. However, as the figures in the results show, breaking the older group into the two age groups has enabled the authors to highlight specific nuances that it would not have been possible to identify otherwise. The results show that changes in behaviour can be identified which would seem to reflect differences from student behaviour and evolving lifestyle changes.

The results of this study would have had greater significance if there had been a larger number of participants. However given the time-constraints of this project it is felt that the data gathered forms a useful basis for further research amongst a much larger sample of graduate and non-graduate young adults. Whilst a much larger sample would have been desirable, the limited numbers still enable the presentation of indicative results, particularly as those provide a coherent picture of this age group consistent with observed behaviour.

Results and Discussion

The results show that almost all of the respondents usually bought alcohol from supermarkets for off-trade consumption and that pubs, nightclubs and restaurants were their preferred place of consumption in on-trade premises, in that order. Over 80% indicated that they drank alcohol to be sociable and or to relax

Gender Differences

All the females spent a half to a third less money per week than their male counterparts on alcohol, apart from older non-graduates. In this group spend by gender was approximately the same. This is not reflected in the consumption levels. Figures 1 and 2 show that male students significantly out drank the female students as well as all other groups. Whilst male and female graduate respondents had fairly similar consumption patterns there were more heavy male drinkers. However, in the non-graduate population, males in the youngest age group, 18 to 23, were the heaviest drinkers. In all other circumstances female non-graduates consumed more than male non-graduates. This behaviour, contradicting Goddard (2006) and NHS (2007), demonstrates a distinct gender and lifestyle difference.

Take in Figure (No 1 and 2)

Hassan and Shiu (2007) suggested that females are more likely to indulge in LRSOD behaviours, therefore it is surprising that female consumption is often higher than male consumption. There may be several reasons for this one being the previously suggested ignorance about units of alcohol. Whilst all the participants in this study claimed that they were or probably were in control of their alcohol consumption only 19% of respondents claimed that they knew what units were. Analysis of the results showed that only 5% actually did. The most accurate knowledge was displayed by graduates in the 18 – 23 age group and the worst by non-graduates in the 18 – 23 age group.

Ritchie (2007) shows that women drink more wine than men in non-food social situations, discussing the point that wine has for many taken over from tea / coffee as the welcome offering when friends drop by. As discussed earlier in this paper there is much misunderstanding about the number of units of alcohol contained in the 'average' glass of wine. Analysis of the qualitative interviews shows that none of the female participants realised how much they were drinking. They all thought that they were drinking less than they actually were and expressed alarm as to the actual number of units consumed, *'I will have to take more notice in the future'*. This suggests that the females in the 24 to 29 age group may have been trying to moderate their drinking but not all of them had enough information to do so successfully.

Unlike the female participants and in direct contradiction to medical advice, non-graduate males suggested that as they only went out twice a week their high alcohol consumption per session *'won't do me any harm'*. Again showing more awareness than those with a non-graduate background the male graduate respondents agreed that their intake was high but felt that they *'still had plenty of time to slow down'*.

This indicates both a noticeable gender based attitudinal difference towards alcohol consumption and different levels of knowledge about alcohol related harm amongst graduate and non-graduate populations.

Identifying the Heavy / Binge Drinkers

Figures 3, 4, 5 and 6 show that the students' maximum consumption was generally higher than those of the other groups, and that female students drank significantly less than their male counterparts. Student and non-student drinking patterns can also be seen to be very different, (Figs. 5 and 6). The students drink throughout the week, with female consumption being fairly steady, lower on Tuesdays and peaking on Saturdays. Male student consumption peaks on Saturdays and Wednesdays although heavy drinking can also take place on Sundays. However student peak drinking is much lower, particularly for females, than for all other groups. For all non-student respondents the most significant night for drinking is Saturday with another slight rise on Wednesdays particularly amongst female graduates aged 24 to 26. Analysis of the qualitative data confirms this pattern, with most non-student respondents saying that they go out drinking twice a week on average.

Take in Figure (No 3, 4, 5 and 6)

In Cardiff drinks promotions tend to be run during the week not at weekends. This may be one reason why the students went out during the week; since they have limited incomes they *'have to try and get as much as possible for it'* Reflecting the Wednesday peak one non-student commented during their semi-structured interview that their second night out was during the week when promotions occurred, *'happy six hours in my local'*, and not in the city centre clubs who were running promotions attractive to students. A significant factor in the relatively low consumption peak on Saturdays amongst students is likely to be that they are on the other side of the bar. All Cardiff city centre pubs, bars and late night entertainment venues have staff who are students; often they may be the majority of the staff. So whilst those in employment go out at the weekends many students work serving them.

Whilst these drinking patterns undoubtedly reflect lifestyle, in that they reflect the impact and sanctions of work, (further discussed in Public Image Including Hangovers) they may also be reflecting the local behaviours. Amongst others Mathews *et al* (2006) discuss the fact that drinking patterns often have regional characteristics; factors such as commuting, for instance, will impact upon time spent consuming alcohol.

Figures 1 and 2 highlight differences in alcohol consumption pattern between graduate and non-graduate participants. In each age group pair male graduate populations drank more than their non-graduate male counterparts. The highest consumption was amongst male students, significantly higher for all other groups and reflected in the amount that they spent on alcohol. However the next highest group were male graduates between 27 and 29. In the student group this may reflect that although students may have low incomes they generally come from affluent backgrounds, are not afraid of debt, and have less claims of their disposable income than at later stages in life. Upon graduation student loans have to be paid back from starter salaries. Some years later salaries are likely to have risen, debt to have reduced and so more disposable income can be spent on socialising and alcohol. In contrast alcohol consumption levels in this sample fell steadily as the age range increased for the male non-graduates whilst rising for their female counterparts.

Whilst it is possible to rationalise why the female non-graduates may have increased their alcohol consumption, see Gender Differences, plus rising salary levels, the authors were not able to explain the pattern for the male non-graduates. It may reflect an activity such as acquiring a mortgage which takes a disproportionate amount of income in comparison to the graduate populations. Financial sensitivity is reflected in the semi-structured interviews where the non-graduate interviewees indicated much greater price sensitivity than the graduate respondents, whether student or not. Apart from one older non-graduate female interviewee, the younger respondents spent more per week on alcohol than the older ones, but in discussing the range of their spending members of the graduate groups displayed a willingness to spend more than non-graduates. The non-graduate groups commented more about high on-trade prices and buying from supermarkets for price reasons. Another difference displayed between populations was that the graduates displayed more, and more accurate, knowledge about the issues related to alcohol misuse than the non-graduate respondents in both the quantitative and qualitative data analysed. As Cable and Sacker (2007) and Smith and Foxcroft (2007) suggest these differences in attitude may reflect back to differing family lifestyles and cultures of interaction with alcohol. These results again highlight the point that student behaviour is not reflected in the behaviour of all other groups of young adults at all times.

Place of consumption / preloading

The results showed that all respondents consumed alcohol in pubs, nightclubs and restaurants to varying degrees. They all also confirmed that they preloaded, although not all of them did so all of the time. Unfortunately data was not collected as to where each group preloaded. No respondents used the 'other' category agreeing with Forsyth (2006) and Galloway *et al* (2007) that meeting others, price and proactively getting drunk are the significant reasons for preloading. As figures 7, 8, and 9 show responses highlight significant differences in the reasons for this behaviour, perhaps one of the most interesting being that it was the young male non-graduates and the oldest female non-graduates who preloaded the most (Fig. 7).

Take in Figure (No 7, 8, and 9)

Fig. 8 shows that spending less was more significant for non-graduates than graduates overall particularly for males aged 24 – 26. This group also preloaded to get drunk. The only other male group to preload more to get drunk was the student group. Male graduates and the non-graduate 27 to 29 group suggested that meeting up with their friends was the most important reason for preloading. This agrees with Forsyth (2006) and Galloway *et al* (2007) in suggesting that if the respondent had been working hard all week they might want to catch up with their friends, talk and socialise somewhere quiet, before their night out.

Figure 9 shows that meeting up with friends was important for all female respondents, but particularly so for the youngest groups and the oldest non-graduates. This last group was the only female group which did not preload to get drunk. However it is one of the groups which usually consumes more than their male counterparts, the other being non-graduates aged 24 to 26 (figures 1 and 2). All the female respondents except the non-graduate 27 to 29 year olds acknowledged preloading to get drunk even if they did not drink as much as their male counterparts. This could suggest that society still expects women to be more sober in public than men, so women consume at home in private with their friends and then just drink small amounts of alcohol or soft drinks in public reflecting the work of Berridge *et al* (2007) or that they are indulging in what they perceive to be LRSOD behaviours (Hassan and Shiu, 2007) and drinking at home rather than in public places.

Figure 9 also shows that reducing spending on alcohol was more significant to female respondents in all groups except the non-graduates males aged 24 to 26 than it was for male respondents. Again, this may reflect Hassan and Shiu's (2007) work if the female respondents felt that they had to make sure that enough money was kept back to ensure a safe return journey.

Public image including hangovers

Perhaps one of the best reasons why the student population cannot be taken as representative of young adults as a whole is their attitude towards hangovers. As figure 10 shows over 70% of the students had missed work / university because of a hangover, there was no gender difference. However in the all other groups distinct gender behaviours were identified. Amongst the graduate employees days missed due to hangovers fell off very swiftly so that no days at all were missed due to hangovers in the oldest group even though it was one of the higher drinking groups (fig. 1 and 2). Conversely amongst the non-graduates male respondents days missed from work rose from less than 10% amongst the highest drinking and youngest group to nearly 20% in the oldest and lowest consuming age group. Like the graduate males, non-graduate female hangovers fell across the age groups so that no days were missed in the oldest group even though this is a heavy drinking group (fig. 1, 2, and 9). It is this group which considers social preloading to be the most important (fig. 9).

It is likely that when the students answered the question they were indicating that they were able to miss university classes without significant penalties being incurred rather than employed work, thus they were less likely to get out of bed if they felt unwell. For the other graduate cohorts the results may indicate that as their seniority, or potential seniority, within work rises so do the potential penalties of being absent. Since those without graduate qualifications generally have

lower paid and more routine work, it may be that this group also have less commitment to work and view any penalties potentially incurred as being less serious than the graduates. It may also be that it is in this group that the young male adults identified by Graham and Wells (2003) as going out purposefully to cause violence can be found. Enjoying both getting drunk and fighting it may be that when they sober up they find that they are not able to go to work as their 'war wounds' are worse than they appeared and or that missing work due to drink related harm is simply part of the macho appeal of drinking

Mathews *et al* (2006), Berridge *et al* (2007) and Hassan and Shui (2007) all show that women can be involved in heavy drinking, although they suggest that it is usually at a lower level than for men. None of them discuss the need for women to be macho in their relationship with alcohol unlike men. It may be that the reported absence from work by women is actually reflecting alcohol consumed. Since women are affected more by alcohol than men they are likely to feel more unwell sooner. Since they don't have the macho need to be seen to be able to handle their drink they can afford to take more time off than men to recover. However this would not explain why none of the females in the oldest no-graduate group reported being ill with a hangover, unless they really were preloading and then not drinking in public, thus ensuring that they were already sobering up by the time that they went home.

A further question arises about the female graduate drinking culture. If female graduates are aiming for a similar career path as their male counterparts why do they drink in a way which means that they have to take more time of work? Why in this study do they not appear respond in the same way as their male colleagues?

Conclusion and Recommendations for Further Research

The purpose of this paper was to investigate drinking patterns in young adults. It was also to establish whether or not the behaviour of student populations can be considered to be representative of young adult populations as a whole. In the absence of contradictory evidence the results presented in this paper suggest very strongly that there are many different types of alcohol related behaviours occurring in diverse groups of young adults. They suggest that gender, the nature of work, financial security and habitus all play significant part in developing attitudes towards alcohol and alcohol-related behaviours. The results also suggest that students change their interaction with alcohol very quickly after ceasing to be a student. This means that even for a particular group studied the results are likely to be meaningless in regard to that cohort as soon as the students graduate, although they may reflect the behaviour of the next cohort of students. The results also strongly indicate that sometimes students may display similar behaviours to some other young adult groups whilst, at other times, their attitude, behaviour and interaction with alcohol is unique to their social group.

Whilst the results presented in this paper have been based upon a small sample this does not make them invalid. Indeed only a small number of the differences in alcohol-related behaviours in young adult populations which were identified by this research project have been able to be discussed in this paper. The authors would suggest, rather, that the results have serious implications for government policy aimed at developing moderate drinking behaviours in young adults. As previously discussed the government and other stakeholders have done much work in the on-trade to improve safety and reduce anti-social drinking behaviours. However the results

presented in this paper suggest that since much alcohol consumption on a good night out takes place in the home (or off-trade) environment there is much less scope for the government to influence drinking behaviours than had previously been thought. Coupled with this, the results also suggest that student populations are not representative of young adult population *per se* although they may be the easiest sample to investigate. Therefore these results question the validity of much current research where issues and behaviours which are relevant to student populations have been used as indicators for young adult behaviour in general.

The authors intend to use this project and its results as a pilot for a larger, statistically significant study.. That project will enable them to develop the issues raised in this paper, establishing those areas where the attitudes and alcohol-related behaviours of student populations differ from those of the general adult population and fully identifying other sub-populations in the 18 to 30 age group This knowledge will be able to be used by the government and other stakeholder groups to better inform their social policies in relation to the development of moderate drinking cultures in the UK.

A further significant area for research which was identified by this study was that of perception of alcohol consumed, actual alcohol consumed and safe levels of alcohol consumption. After each questionnaire was completed the respondents were asked if they would like to know how many units their described consumption amounted to. 70% asked for this information. As discussed in the paper most, particularly women, were very surprised by the number of units they were actually consuming. They had all thought that it was less and, as the paper suggests, may have thought that they were actually utilising safe drinking behaviours. Given the surprising and dangerously high consumption levels demonstrated by some respondents another area of follow up research would be to establish whether or not 'knowing' moderated consumption. This knowledge could also form the basis of further work into the development of moderate alcohol-related consumption behaviours.

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APPENDIX 1

Extract from the self-administered questionnaire; includes all questions relevant to this paper.

7

From the following please indicate what you believe is 1 unit of alcohol; (Please circle 1 in each column)

Wine	Beer/Lager	Spirits	
125ml	1/3 Pint	25ml	
175ml	½ Pint	35ml	
250ml	1 Pint	50ml	

8

Do you know what the Governments weekly & daily recommended alcohol limits (in units) are for men and women?

Yes () No () Not sure ()

8a If yes, please enter an amount of units in each box below;

	Weekly	Daily		Weekly	Daily	
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8b If no/not sure, please enter, in units, what you think would be a safe drinking limit.

	Weekly	Daily		Weekly	Daily	
--	--------	-------	--	--------	-------	--

10

How many drinks do you typically consume for each of the categories below? where zero is applicable please enter 0.

spirit 35ml	shots	lager/beer	lager/beer	cider	alcopops	wine	
mixed drinks		bottle/can 330ml	draught	pint	275ml	175ml	
			pint				
Monday							
Tuesday							

Wednesday								
Thursday								
Friday								
Saturday								
Sunday								

10a Which brand of spirit, shot, lager, beer, cider, wine and alcopop do you drink most often?

Please enter 0 if product never purchased

Spirit	Shot	Lager	Beer	Cider	Alcopop	Wine

Using the above information the researcher will calculate your daily/weekly unit intake using an approved unit conversion table. If you would like to be informed of this figure please tick below.

Inform me

16

Do you drink alcohol at home/friends house before going out for a night?

Yes No Sometimes

16a If yes/sometimes; what is the reason for this? Tick all that apply

- Whilst waiting for complete group
- Spend less when out
- Get drunk before going out
- Other, please specify _____

16b If no, why not?

24

Do you consider that you are in control of your alcohol intake?

Yes No Probably

25

Have you ever failed to attend work/university because of alcohol intake?

Yes No

The researcher may wish to follow up the answers you have given on this form so as to get more in-depth information about your consumption habits. Please indicate below if you agree to the researcher contacting you again for the purpose of a follow-up interview.

Yes ()

No ()

Thank you for taking the time to fill in this questionnaire. All information contained will be treated in the strictest of confidence and no personally identifiable information will be used within the dissertation.

Beer, ale and stout	Bottle (330ml)	Can (440ml)	Pint	
Ordinary strength (3.5 - 4%) (John Smith's, Boddington's, Guinness)	1.3 units	1.8 units	2.3 units	
Premium strength (5%) Lager or beer (pint)	1.6 units	2.2 units	2.8 units	
Cider	2 units+	2.6 units+	3.4 units+	
	Bottle (330ml)	Can (440ml)	Pint	Litre
Ordinary strength (6%)(Dry Blackthorn, Strongbow)	2 units	2.6 units	3.4 units	6 units
Strong (9%+) Lager	3 units+	4 units+	5 units+	9 units+
	Bottle (330ml)	Can (440ml)	Pint	
Ordinary strength (3.5 - 4%) (Carling Black Label, Fosters)	1.3 units	1.8 units	2.3 units	
Premium strength (5%) (Stella Artois, Carlsberg Export, Grolsch, Kronenbourg 1664)	2 units	2.2 units	3 units	
Super strength (9%+) (Tennent's Super, Special Brew)	3 units+	4 units+	5 units+	
Alcopops	1 bottle (275ml)			
Ordinary strength (5%) (Smirnoff Ice, Bacardi Breezer, WKD, Reef)	1.4 units			
Shots		Small measure (25ml)	Large measure (35ml)	
Tequila, Sambuca	1 unit		1.3 units	
Spirits	Small measure (25ml)	Large measure (35ml)	Small double measure (50ml)	Large double measure (70ml)
Gin, rum, vodka & whisky	1 unit	1.4 units	2 units	2.8 units
Wine (red or white)	Standard glass (175ml)	Large glass (250ml)	Bottle (750ml)	
11%	1.9 units	2.8 units	8.3 units	
12%	2.1 units	3 units	9 units	
13%	2.3 units	3.3 units	9.8 units	
14%	2.5 units	3.5 units	10.5 units	
Fortified wine	Standard measure (50ml)			
Sherry & port	1 unit			



Table 1. Unit Indicator for a Representative Range of Alcoholic Drinks. (Alcohol Concern, 2007)

[1] "Pre-loading" and "front loading" tend to be used synonymously in the literature. This paper

uses the term pre-load to indicate drinking before going to an on-trade premises (for whatever reason) and front-loading to mean deliberately changing a pattern of consumption via heavy early evening off-trade drinking. Pre-loading includes front-loading, and hence we generally just use pre-loading in this paper.