Student drinking in the transition to university and across the first academic year

Amy Fuller

Thesis submitted to the University of Nottingham for the degree of Doctor of Philosophy

April 2019



For Dave

Abstract

Previous research has shown that high numbers of students drink hazardously or harmfully, or binge drink, but little is known about how drinking patterns establish or develop for this population. The purpose of this thesis was to understand this further by exploring patterns of, experiences with and potential influences upon drinking among young adults as they transition to university and across their first academic year. A sequential, with embedded concurrent, mixed-methods design was adopted, consisting of four studies which explored: 1) the nature of events and alcohol-related content students are exposed to at a university freshers' fair; 2) students' drinking patterns prior to university and across the first academic year; 3) the perceptions and experiences of both drinkers and abstainers, with alcohol, across the same time period; and 4) the views of staff who have a role in student experience and welfare on the university drinking culture.

Many students came to university having engaged in or with an established pattern of binge drinking, but higher proportions reported doing so in the first month of university, more frequently and with higher quantities of alcohol. This remained elevated across the year. The increase appears to be initially driven by students' expectations that drinking is central to socialising at university as well as an emphasis on alcohol-centred events from the Students' Union during freshers' week. Student-led groups emerged as a potentially important influence upon student drinking as they had a strong influence over the nature of social events from freshers' week and beyond, with many of events that they advertised in their freshers' fair materials and organised throughout the year were centred on drinking heavily. Many drinkers and abstainers, however, wanted a more socially inclusive environment where drinking was not the focus. Staff provided examples of where they had attempted to

address the binge drinking culture, to reduce adverse incidents resulting from heavy drinking and make the university more inclusive to light- and non-drinkers, although efforts were fragmented highlighting the need for policy to ensure a consistent and comprehensive approach on student drinking.

This thesis demonstrates for the first time that how much and how often students' drink increases upon arrival to university and then remains elevated across the academic year. It identified the presence of pro-alcohol messages prior to, upon arrival and across the university academic year. This suggests that although the time before university may be important in establishing drinking behaviour and drinking expectations, there are a number of influences at the transition point and across the academic year which may be reinforcing and developing this behaviour for many students. The inclusion of abstainers as well as University and Students' Union staff in this narrative has highlighted the importance of considering their views in attempts to reduce how much students drink, and helped to shape the recommendations to the University on how to address the binge drinking culture and create a more socially inclusive environment in the future.

Acknowledgements

It almost goes without saying that this has been the most testing task I have undertaken so far in my academic career. Facing and overcoming the many challenges that arose from this thesis would not have been possible without the support of the following individuals. Firstly, I would like to express my gratitude to my supervisors, Dr Lisa Szatkowski, Dr Manpreet Bains, Dr Kate Fleming, and Dr Rachael Murray, who gave me the opportunity to develop the studies within this thesis and continue to research in my area of interest. For your advice, time, academic and moral support, thank you. I have learnt so much from you all in this process. Next to the Students' Union who provided me with the access to collect much of my data and recruit participants. A special thanks goes to Sarah Murray who welcomed and facilitated much of this work. A very important thank you also goes to all the individuals who gave their time and effort to participate in the studies.

To my friends and fellow public health researchers in room B125. Thank you for the laughter, the tea breaks and the company. It would not have been the same without you. Also to my friends across the UK for cheering me on along the way, you are all wonderful. To my parents, I would have never gotten to this point without your love and support. Thank you for the sacrifice and all the opportunities you have given me in life, I will be eternally grateful. Finally, to my husband Dave, the unwitting inspiration of this work. You have been my rock, a steadfast companion and supporter throughout this whole process. I could not have gotten through it without the fun, laughter and adventures you bring into my life; I can't wait for what else is in store for us.

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Abbreviations

ABV – Alcohol by Volume

ALSPAC – Avon Longitudinal Study of Parents and Children

ATS – Alcohol Toolkit Study

AUDIT – Alcohol Use Disorders Identification Test

BSQF – Beverage Specific Quantity Frequency

CMO – Chief Medical Officer

DALY – Disability Adjusted Life Year

ESPAD – European School Survey Project on Alcohol and Other Drugs

EU – European Union

FW – Freshers' Week

GHS – General Household Survey

HED – Heavy, Episodic Drinking

HSE – Health Survey for England

IPV – Interpersonal Violence

JCR – Junior Common Room

LRT – Likelihood Ratio Test

MUP – Minimum Unit Pricing

NICE – National Institute for Clinical Excellence

OECD – Organisation for Economic Co-operation and Development

OPN – Opinions and Lifestyle Survey

OR – Odds Ratio

RR – Relative Risk

RSOD – Risky, Single Occasion Drinking

SCAM – Student Choices and Alcohol Matters report

SDDUYP – Smoking, Drinking and Drug Use among Young People in England survey

SU – Students' Union

SUS – Students' Union Survey

UI – Uncertainty Interval

UUK – Universities UK

WHO – World Health Organisation

Presentations, publications and other work arising from this thesis

Peer reviewed publications

Fuller A, Fleming KM, Szatkowski L, Bains M. Nature of events and alcohol-related content in marketing materials at a university freshers' fair: a summative content analysis. *Journal of Public Health*. 2017; 40(3):e320–e327.

Conference presentations

Fuller A, Szatkowski L, Fleming K, Bains M. *Alcohol content at a university fresher's fair.* UKCRC Health Research Centres of Excellence Conference; Norwich, UK; 14-15 July 2016 (poster presentation).

Fuller A, Szatkowski L, Fleming K, Bains M. *Exploring students' experiences with alcohol at university: initial analysis from a longitudinal qualitative study*. Alcohol Research UK Annual Conference; London, UK; 3-4 April 2017 (poster presentation).

Fuller A, Murray R, Szatkowski L, Fleming K, Bains M. *Exploring students' perceptions of and experiences with alcohol during the transition to university and across the first year*. 62nd Annual Scientific Meeting of the Society for Social Medicine; Glasgow, UK; 5-7 September 2018 (oral presentation).

Masters project supervision

I co-supervised the following dissertation project on the 2015/16 Masters in Public Health programme in the Department of Epidemiology and Public Health, University of Nottingham: *Exploring alcohol content on social media sites run by student-led sports and social clubs at the University of Nottingham*.

1 Overview of this thesis and its methodological approach

1.1 Objectives of the thesis

This thesis sets out to explore patterns of, experiences with and potential influences upon drinking among first year undergraduates as they transition to university and across their first academic year. As will be set out in the literature review in **Chapter 2**, alcohol is a leading risk-factor for morbidity, premature mortality and disability in the UK. The impacts of exceeding the UK drinking guidelines and engaging in heavy drinking occasions (binge drinking) include a range of short- and long-term health and social consequences, resulting in costs to the individual and wider society. Drinking in adolescence has been associated with the maintenance of heavy drinking patterns and alcohol-use disorders later into adulthood, however, little is known about the pathways into drinking. A unique transition into adulthood is through university, which represents a transient stage between adolescence and adulthood. Recent studies in the UK have highlighted the elevated levels of consumption among university students, who are thought to misuse alcohol more than their non-university peers. It has been suggested that some students come to university with an established pattern of binge drinking, but that the first week of term may also serve as an introduction to the university drinking culture and be associated with an increase in alcohol consumption. The transition to university has been little studied, particularly in relation to changes in drinking patterns and experiences. With this in mind, the key objectives of this thesis, which each shape one of the four studies, were to:

1. *Explore the nature of events and alcohol-related content students are exposed to by student-led groups and local businesses at a freshers' week fair.*

It is acknowledged that peers play an important role in young adults drinking behaviour, and student-led sports and social groups have been identified as a potential influence upon student drinking behaviour. There are, however, a dearth of studies exploring these groups in relation to drinking, particularly in the UK where such groups take on a different role to the traditional fraternity and sorority groups studied in the US. In the effort to explore potential influences upon drinking during the transition to university a unique marketing event called a freshers' fair, which takes place in the first week of the academic year and represents student-led groups' first point of contact with new university students, was identified as an opportunity to explore how these groups portray and promote drinking. Furthermore, this event is commonly attended by local businesses including drinking venues looking to market their services and/or products to new students. **Chapter 3** comprises the first study to provide evidence on the nature and occurrence of social and extracurricular events that are promoted by these groups, including how many featured or were related to drinking, as well as the nature and occurrence of other alcohol-related content students are exposed to at a university fresher's fair.

2. Examine students' drinking patterns prior to university and across the first academic year.

The transition to university is a potentially important pathway into the establishment and/or development of drinking behaviours as young people enter adulthood. As discussed above, it has been suggested students may arrive at university with an established binge drinking pattern, but arrival may also be associated with an increase in alcohol consumption. No study, however, has quantitatively measured drinking behaviour prior to, upon arrival and across the first academic year among first year undergraduate students in the UK. **Chapter 4** comprises the first study to explore changes in how often and how much students drink, including how often they binge drink, over the transition to university and across the first academic year. In addition to this, with a dearth of evidence on the frequency of binge

drinking among university students, this study includes a unique two-tiered measurement of binge drinking to explore changes in how frequently students binge drink with different quantities of alcohol upon arrival to university. This study highlights the importance that the university environment may be playing in the establishment and development of risky drinking patterns, such as binge drinking.

3. *Explore students' perceptions and experiences with drinking prior to university and across the first academic year, including both students who drink alcohol and those who abstain.*

In addition to quantitatively measuring drinking behaviour across the transition to university and first academic year, a detailed exploration of first year students' views and experiences with drinking during this time frame was important elucidate the findings. A recent study exploring alcohol use during freshers' week with first year undergraduate students in the UK found important influences upon drinking at this time, notably the abundance of drinking-related events and emphasis that students placed on drinking when socialising to aid social integration. However, this took place at a single university and did not explore beyond the freshers' week period. **Chapter 5** adopted a longitudinal qualitative approach following students from the point of transition to university and across their first academic year to conduct an in-depth exploration of how the student drinking experience unfolds across the year. This study confirms previous findings in relation to drinking during the initial week at university, but provides new evidence about how these experiences may shape students' engagement in the drinking culture across the academic year, as well as the role of older students who run sports and social groups in perpetuating the binge drinking culture that exists within the university social environment.

It has also been acknowledged that there are many non-drinking students who may not associate with this behaviour and experience exclusion from the culture of drinking to

excess, particularly during the initial transition period. However, much of the scant evidence in relation to their experience is not from the perspective of abstainers and the single study in the UK was limited to females' experiences. Chapter 5 therefore also included abstainers in the narrative, exploring the views and experiences of both males and females. The findings highlight the importance of considering abstainers' needs in efforts to curb the university binge drinking culture.

4. *Explore the views of staff in student experience and welfare on the university drinking culture and how it could be addressed.*

To gain a holistic perspective of the university drinking culture, potential influences upon drinking among first year undergraduates, and aid the creation of recommendations to reduce binge drinking at the University, **Chapter 6** explores staffs' views on the university drinking culture and opportunities to address it. This study contributes to the dearth of evidence that exists in relation to university staffs' views of the university drinking culture despite the fact that they play an important role in addressing it. This study considers the views of not only those working within the University but also the Students' Union (SU) who play an important role in the student social experience, are likely have a large influence over the university social environment, and have lacked representation in previous studies. The findings highlight how University and SU staff consider reducing the number of students' binge drinking and creating an inclusive social environment for drinkers and abstainers to be important, the opportunities that exist at the university in order to do so, but also draws attention to the barriers which have prevented them from taking a consistent approach on this issue.

1.2 Setting of this thesis

Each of the studies presented were conducted at a single university. This was not only a pragmatic approach (further details given in the author's reflexive statement below), but also enabled the author to provide a richer understanding of the experiences and potential influences upon drinking by examining various processes within the university. A similar approach has been adopted elsewhere when exploring drinking behaviour in first year undergraduates (1). The university where the research took place is a large public university in the East Midlands, UK, comprising a main campus just outside of the city centre and several smaller external campuses. The intake for first year undergraduates is approximately 7,500 students per annum, and approximately a quarter of the student population are international. The university has a brief alcohol policy that covers alcohol and drug usage for staff and students. This policy states their statutory duty to ensure the safety and welfare of staff and students in order to comply with the Misuse of Drugs Act (2), whilst allowing responsible recreational use of alcohol within the University. In relation to students, the policy states that the University: discourages excess alcohol consumption through responsible sales and events; promotes social acceptability of non-alcohol consumption; provides support for those who experience difficulty with alcohol use; and has widely available community educational information on the consequences of alcohol misuse. In implementing the policy, there is a clear emphasis upon providing help and support with alcohol use at the individual level where they represent a risk to themselves or others safety as a result of alcohol misuse, as opposed to the prevention of excessive alcohol consumption.

1.3 Methodological approach

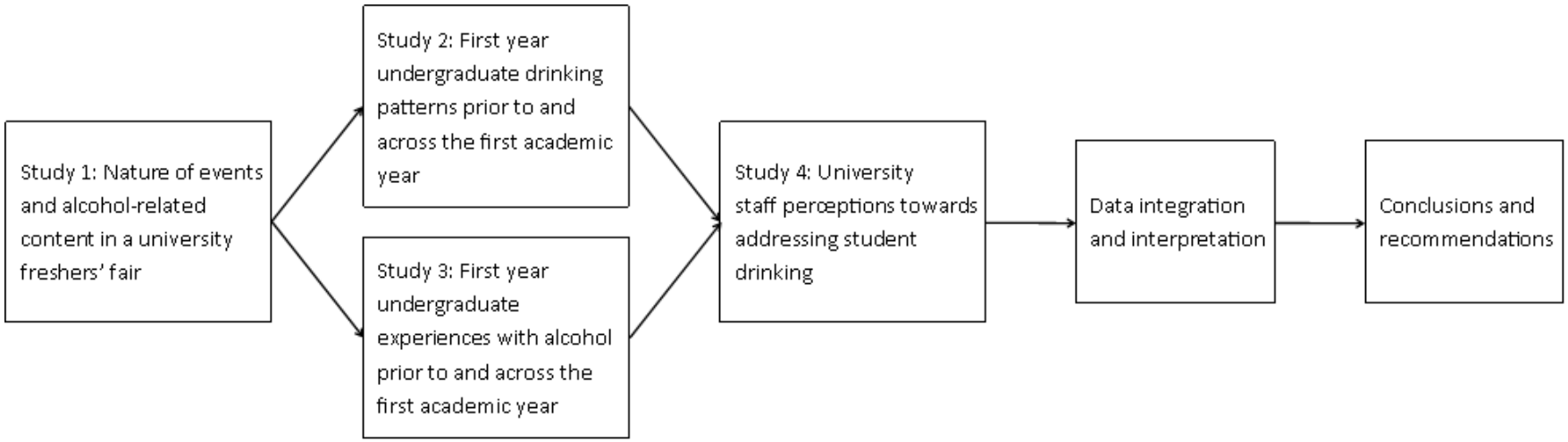
All researchers bring a basic set of beliefs to their inquiry, their philosophical orientation, which guides the formulation of research questions and how information is sought to answer them (3). The interpretive framework upon which this thesis is based is pragmatism. It has been argued that the use of a singular paradigm constrains intellectual curiosity and blinds a researcher to certain aspects of social phenomena (4). Pragmatism rejects the dichotomy of the more objective positivism and subjective constructivism, highlighting they both attempt to improve researchers' understanding of the phenomenon of interest (5). It accepts (philosophically) that there are both singular and multiple subjective realities, concerning itself with the research problem and consequences (4), allowing researchers to be free to determine what works to answer the research question (6). Reality is therefore known through making use of research tools that create both deductive (objective) and inductive (subjective) evidence, lending itself to the use of mixed-methods (3-6). This practical and outcome-orientated method of inquiry helps researchers to better answer their research questions and produce useful knowledge that can be transferred or generalised into practice (5). For example, intervention studies seeking to determine or infer a cause and effect will now often adopt a quantitative design with concurrent or sequential qualitative work in order to explain the findings in more depth (4).

The thesis therefore takes a mixed-methods approach, using both quantitative and qualitative approaches to meet the overarching aim to explore patterns of, experiences with and potential influences upon drinking among first year undergraduates as they transition to university and across their first academic year. Figure 1.1 demonstrates the process of the four studies, in terms of the order in which they were conducted and how they relate to one another.

Mixed-methods research (MMR) is not fixed in its design, the very nature lends the researcher to take a pragmatic approach in answering the research question, and the steps a researcher can take do not always follow a linear process, rather it may be cyclical, recursive or interactional (5), and quantitative and qualitative work may be undertaken at the same time, one after the other, and may be followed by further quantitative or qualitative work (same ref). This thesis takes a sequential, with embedded concurrent, mixed-methods design (Figure 1.1) with data generated from the individual studies used to inform and develop subsequent studies, as well as explain and illustrate the findings of each other (7). The aim of this approach was to use insights and procedures from both quantitative and qualitative approaches to supplement and inform one another, resulting in more complete a picture of drinking during the transition to university and across the academic year.

Study one was conducted first with data collection taking place in September/October 2015, the findings of which informed the exploration of the type of events student-led groups put on throughout the year and how they promoted drinking within the interviews in study three. Studies two and three were then undertaken concurrently during the next academic year (2016/17) so that the findings could be used to elucidate each other. The findings of study three were used to inform the line of inquiry in study four, which was undertaken at the beginning of the following academic year (2017/18). The findings from the four studies were then integrated together as a descriptive narrative. This narrative presents and then interprets the findings according to the overall aim, to demonstrate the change in drinking patterns and experiences across the transition to university and first academic year, and highlight the potential influences upon drinking behaviour identified across the four studies according to this timeframe. Recommendations to the University on how to reduce binge

Figure 1.1 Diagram depicting the mixed-methods design and four studies in this thesis



drinking and create a more inclusive social environment are then made as a result of these combined findings.

1.4 Reflexive statement

It is important for researchers to position themselves in and make clear the biases, values and experiences they bring to a research study. Taking a pragmatic stance, it is also important to lay bare the researchers values as knowledge presented is a reflection of both the researchers' and participants' views (3, 4).

It is my intention to set these out now and then reflect upon the steps that were taken to reduce the chance of bias where relevant in the research chapters that follow. My position within the research involved bringing my own personal and academic history into the process. My student experience began over a decade ago as a young adult entering university as an undergraduate immediately after school, leaving the family home for the first time. Therefore I have experienced the context being studied having undergone the transition to university, been a part of university campus culture and been both a member and leader of a student sports club. Within this time I engaged in binge drinking practices with peers, attended nightclub events, and organised events that involved drinking with other leaders of the sports club. Since leaving university, and having time to reflect back upon my own and others' drinking practices during this time, I began to question why it was or was not a big part of different students' lives, sparking my curiosity in this subject. I would describe myself now as a person who drinks alcohol within the recommended drinking

guidelines. As part of my Masters studies at another university in the UK, I then undertook a research project which informed the basis of this thesis, which has been published. This was a qualitative study exploring the need and opportunities to manage binge drinking among undergraduate students. This involved interviewing staff at the university, sports leaders and students on their perceptions of drinking at university. This work highlighted the potential of student leaders and the university environment to influence student drinking practices, and the experiences of abstainers, but a limited sample restricted the findings and highlighted a need to conduct a more in-depth exploration of student drinking, and follow-up on these findings. From here, during my role as a Research Assistant at the University of Nottingham, a collaboration was built with the Students' Union (SU) of the University in this study who were participating in the NUS Alcohol Impact scheme. There was no academic involvement with the scheme due to its collaborations with the alcohol industry and myself being a member of the UKCTAS which prohibits this. However, a relationship had been established with the SU and this informed the design of the four studies presented in the thesis and was critical for successful data collection (in providing access to the freshers' fair, online survey and participants for interview).

My knowledge, experience and position on drinking and the university context, and my working relationship with the SU could therefore have impacted upon data collection. Thus, it took careful consideration in the research design to minimise any of these biases. One example of this was the adoption of a semi-structured interview approach in the qualitative interviews; this was used to minimise researcher bias by allowing flexibility to deviate from the interview guide during discussions but allow the use of existing literature to inform the line of questioning. I was also aware that every institution is a unique setting and so any prior

knowledge about university may not be true of the setting of this thesis. Although difficult, I therefore made sure to detach from my own viewpoint on drinking and drinking in the university context in order to approach the research design from a neutral stance, seeking to build an understanding of this context, and then identify areas of concern and ways to tackle these using the new and existing evidence.

Taking a neutral stance was also important when coming into contact with research participants. My experience of discussing this work highlighted to me how almost everyone I come into contact with has an opinion on drinking and are keen to discuss the nature of the research. I was therefore mindful going into data collection to give a distant, impartial opinion when asked by participants before, during or after interviews, which did occur on several occasions. This was taken in order to not influence responses in later interviews (in the case of students) or of those who may later take part in an interview (in the case of staff, who may have recommended colleagues for inclusion in the study and relayed their experiences with me to them). I also did not reveal my drinking status or past drinking experiences with any research participants, so as not to bias what they shared with me during the interviews. My supervisors, who were independent to data collection, were also utilised in the development of the research and data analysis to reduce potential researcher bias and improve the reliability of the findings.

Creswell argued that studying one's own workplace may affect the researcher unfavourably if they report negative data (3), highlighting the potential issue of power and risk to myself as an author who was undertaking this research within their own organisation. Being mindful of this, I present a thick and rich description of the phenomena being studied within the

qualitative chapters, ensuring that all voices are represented, in a step to increase the validity of the findings and ensure the accounts are accurate and insightful. Again, my supervisors were also important in providing an independent view during data collection and analysis throughout the four studies.

1.5 Outline of thesis chapters

This thesis consists of six chapters. **Chapter 2** is a literature review of alcohol use in the UK, among young people and university students, covering: recommended intake and classification of alcohol consumption; the health and social harms of alcohol; alcohol consumption in the UK, during adolescence and young adulthood, and among university students; and young adult drinking culture. This followed by the aims and objectives of this thesis, which set up the four research chapters.

Chapters 3 – 6 are the research chapters, presenting the four studies that make up this thesis. Each of these chapters is presented as an individual research study, comprising their own introduction, methods, results, and discussion and conclusion sections. **Chapter 3** presents a study which explored the nature and occurrence of events and alcohol-related content on marketing materials handed out by student-led societies and local businesses at a university freshers' fair. This study was published in the Journal of Public Health in December 2017 (**Appendix 8.1**). **Chapter 4** is a study of four online surveys, which measured the drinking behaviour of first year undergraduate students just before their arrival at university, during their first month, and at two further time points in the academic year. **Chapter 5** then

presents data from longitudinal qualitative interviews with first year undergraduate students. This study considers the views of both drinking and abstaining students on alcohol and their experiences with it prior to and across their first year of university. **Chapter 6** presents data from qualitative interviews with staff at the University with a role in student experience and/or welfare, exploring their perceptions towards student drinking and priorities in addressing it.

Within each chapter the findings are discussed within the wider evidence base, but as the aim of this thesis was to explore student drinking during the transition to university and across the first academic year, a descriptive narrative integrating the findings of the four studies according to the timeframe in the overall aim of this thesis is presented at the start of **Chapter 7**. The key unique findings of this thesis are then discussed against current evidence with mind of how to reduce student drinking in the future, and recommendations to the University are made in light of this new and existing evidence. This is followed by future research recommendations and the overall conclusions.

2 Literature review of alcohol use in the UK, among young people and at university

Alcohol is a prominent commodity and integral to the social, occupational and family lives of many people in the UK (8). Despite this, many people drink at levels which increase their risk of harm. According to Public Health England, in 2014 an estimated 10.4 million people in England were drinking above the recommended low-risk levels of alcohol (more than 14 units of alcohol per week), compared to 25.2 million people who drank at a lower-risk level (14 units or less per week) (9, 10). Public Health England has also placed alcohol as the leading risk-factor for morbidity, premature mortality and disability for 15-49 year olds in the UK, and the fifth leading risk-factor for morbidity across all ages (10). The UK remains in the top ten of Organisation for Economic Co-operation and Development (OECD) countries for harmful and hazardous drinking (11).

Alcohol consumption contributes 10% of the UK's burden of disease as measured by lost disability-adjusted life years (DALYs) (12) compared to 15% DALYs lost from smoking. In 2016, the Office for National Statistics reported that 11.7 deaths per 100,000 were attributable directly to alcohol, a rate which remains unchanged since 2013 but is higher than that observed 15 years ago (13), although this does not take into account deaths where alcohol was a contributing factor (described in **health and social harms**). These are highest among 55-64 year olds, which is reflective of the chronic health conditions caused by alcohol misuse over several years or decades. The UK government has estimated the cost of alcohol-related harms to society in England and Wales to be £21 billion per year, broken down into a £3.5 billion cost to the National Health Service (NHS), £11 billion cost to tackling alcohol-related crime and £7.3 billion cost due to lost work days and productivity (12). These costs

have since been criticised as out of date and not taking into account all the private costs and benefits (those to the individual drinker, such as loss of quality of life, spending on alcohol, or pleasure from drinking) and external costs and benefits (those to others, such as absenteeism, costs of preventing alcohol-related disorders, or social "lubrication") (14), so are likely to be underestimates of the true cost associated with alcohol misuse (15).

This chapter now goes on to set out alcohol use in the UK, among young people and university students, covering: recommended intake and classification of alcohol consumption; the health and social harms of alcohol; alcohol consumption in the UK, during adolescence and young adulthood, and among university students; and young adult drinking culture. It makes a case for exploring alcohol use in the transition to university and across the first academic year, and leads into the aims and objectives of this thesis, which each relate to the four research chapters that follow.

2.1 Recommended intake and classification of alcohol consumption

2.1.1 Drinking guidelines and low-risk drinking

In order to interpret the literature on alcohol use in the UK, it is firstly important to understand how alcohol use is classified and measured. The UK Chief Medical Officer (CMO) reviewed the evidence relating to alcohol consumption and published new guidelines in January 2016 (16). The purpose of these guidelines was to help people understand the risks of their alcohol intake so they could make informed choices about how much they consume, but not prevent those who want to drink from doing so. They consist of three main recommendations on alcohol consumption in order to lower the risk of morbidity and

mortality due to alcohol: a weekly guideline on drinking; advice on single episodes of drinking; and a guideline on drinking during pregnancy:

- The **weekly guideline** recommends that men and women should not regularly drink more than 14 units per week (a unit of alcohol is 8 grams; the equivalent of 250ml standard 4% beer, 76ml standard 13% wine or 25ml standard 40% spirit (17)), spread drinking across three days or more and have several drink-free days a week. This is to keep risk of chronic illness and death caused by alcohol, as well as risks of accidents and injuries, to a low level;
- The advice on **single drinking episodes** is that men and women should limit the total amount of alcohol they drink on any occasion, drinking slowly, with food and alternating with water. They also recommend avoiding risky places and activities, ensuring individuals can get themselves home safely to reduce the risk of injuries and accidents. This recommendation is based on reducing short-term health risks such as alcohol poisoning, and associated harms such as accidents and injuries. There are no recommendations on the maximum number of units per single occasion, due to individual variations in risk;
- During **pregnancy**, or if planning a pregnancy, avoiding alcohol altogether in order to keep any risks to a minimum is recommended.

Drinking at up to 14 units of alcohol per week is classed as 'low risk' drinking, whereby the risk of dying from an alcohol-related condition would be around 1% over a lifetime, comparable to everyday activities that people understand are not completely safe but still undertake, such as driving (16). There are, however, a variety of terms used to describe the usual amount of alcohol an individual consumes (18) which are based on the previous drinking guidelines. Much of the literature concerning drinking behaviour in the UK (some of

which is set out below) have used these as a benchmark for low- and higher-risk drinking. The former weekly guidelines were created in 1987, based on evidence from the Royal College of Physicians to the UK government (19). They recommended drinking no more than 21 units per week for men and 14 units per week for women, to not drink the total weekly unit allowance in just one or two bouts and to have 2-3 alcohol-free days per week. In 1995, the Sensible Drinking report then provided new guidelines based on daily alcohol consumption, recommending that men should not regularly drink more than 3-4 units per day and women no more than 2-3 units per day (20). This change increased the weekly limit for men and women by 33% and 50%, respectively (21), although the British Medical Association favoured and recommended maintaining the 1987 weekly guidelines, classing alcohol consumption within these as *low-risk* drinking (22).

The terms used to describe average alcohol consumption by the National Institute of Clinical Excellence (NICE) (18) are based on the 1987 weekly recommendations for men and women, and have not yet been updated in line with the new low-risk guidelines. Nonetheless, they are still important for understanding how drinking patterns have been measured and described in the literature prior to 2016. Lower-risk drinking, also known as 'sensible' or 'responsible' drinking, is classed as regularly consuming 21 units per week or less for men and 14 units or less for women. Increasing-risk drinking is classed as regular consumption of between 22 and 50 units per week for men and between 15 and 35 units per week for women. Higher-risk drinking is the regular consumption of over 50 units per week for men or over 35 units per week for women. Conversely, the Health Survey for England classifies lower-, increased- and higher-risk drinking according to the newest drinking guidelines. As reported above, lower-risk drinking constitutes males and females drinking up to 14 units per week; increased-risk drinking constitutes males/females drinking between 15 - 50/15 - 35

units per week; and higher-risk drinking constitutes males/females drinking above 50/35 units per week (23).

2.1.2 Additional measurements and classifications of alcohol consumption

In addition to the UK low-risk guidelines, another common measure for alcohol consumption used in the literature presented below on alcohol consumption in the UK is the Alcohol Use Disorders Identification Test (AUDIT) (24), detailed in **Appendix 8.2**. It was developed by the World Health Organisation (WHO) to screen for excessive drinking and assist in the brief assessment of individuals' alcohol intake in primary care settings, although is also used in emergency departments and secondary care (25). AUDIT also classifies drinkers into one of three categories; these differ from the UK classifications of alcohol consumption as they classify individuals according to their risk of harm, rather than intake alone. These classifications are based upon existing definitions from the WHO which describe patterns of alcohol intake that are harmful to health[a] (26) or behaviour that can be classified as dependence (27)[b]:

- [a]Hazardous drinking – a pattern of alcohol consumption that increases a person's risk of harm physically, mentally and/or socially;
- [a]Harmful drinking – a pattern of alcohol consumption that is causing physical or mental damage;
- [b]Alcohol dependence – a cluster of behavioural, cognitive and physiological factors that typically include a strong desire to drink alcohol and difficulties in controlling its use.

The questions on alcohol intake cover typical frequency and quantity of alcohol intake and the frequency of binge drinking (drinking 6 or more units on a single occasion for men and women). Questions also cover perceived control over drinking, the social impact and harm caused by alcohol intake and whether friends or health professionals have suggested reducing alcohol intake. Each question scores between 0 – 4 points, which are added up and presented out of 40. Scores of 8 or more in men and 7 or more in women are considered to be indicators of hazardous alcohol use, as well as possible harmful use or alcohol dependence. More detailed analysis of scores then indicates classification according to the specific terms described above. A shortened version, called AUDIT-C, is also available and used routinely for quicker identification of alcohol harm by asking only the consumption questions from the full AUDIT questionnaire (28). A lower cut off of 5 indicates hazardous, or possible harmful use or alcohol dependence.

The CAGE questionnaire is another popular alcohol screening assessment, although this is used to identify alcohol dependence (29). It consists of four questions, each scored 1 for yes and 0 for. A score of 2 is considered of clinical importance, with a higher score giving an indication of more severe alcohol problems (29).

2.2 Health and social harms of alcohol consumption

Alcohol is a drug with adverse health and social consequences for the drinker and those around them, with wide-ranging impacts on acute and chronic disease risk, and injuries. Alcohol consumption affects the risk of different health conditions in different ways, with some associated with increased health risks and others decreased health risks, dependent upon volume or pattern of consumption (30).

2.2.1 Health impacts of usual/total alcohol consumption

In a review of the evidence by Rehm and colleagues (31), a causal dose-response relationship between average volume of alcohol consumption and increase risk of several diseases was confirmed, including: cancer of the oral cavity, nasopharynx, oropharynx and oesophagus, colorectal cancer, liver cancer, female breast cancer; diabetes mellitus; hypertensive and ischaemic heart disease; ischaemic and haemorrhagic stroke; pancreatitis; and cirrhosis of the liver. Corrao et al. (32) created relative risk (RR) estimates based on average units per day, which give an indication of the higher risk of alcohol on certain diseases over others. For example, the RR of liver cirrhosis when average intake equates to 3, 6 or 12.5 units per day is 1.34, 7.13 and 26.52, whereas for oral and pharyngeal cancer the RR is 1.86, 3.11 or 6.45 for the equivalent. Relative risks for selected alcohol-related conditions are shown in Table 2.1.

In addition, an increase in the risk of epilepsy or worsening the course of existing epilepsy, dysrhythmias (cardiac rhythm disorders) and pneumonia, were also confirmed particularly from heavier alcohol consumption. A positive association with alcohol consumption and the risk of other conditions including certain cancers (of the stomach, prostate, endometrium, bladder, nasopharynx, kidney, ovaries, pancreatic, and lung, and Hodgkin lymphoma), Alzheimer's disease and other dementias, age-related macular degeneration, psoriasis and osteoporotic fractures has also been observed but not confirmed through systematic review or meta-analysis (30).

Table 2.1 Relative risk of harm associated with selected alcohol-related conditions for men and women by average units per day

	Relative risk estimate by average units per day		
	3 units	**6 units**	**12.5 units**
Oral and pharyngeal cancer	1.86	3.11	6.45
Oesophageal cancer	1.39	1.93	3.59
Laryngeal cancer	1.39	1.93	3.59
Colon cancer	1.05	1.10	1.21
Rectal cancer	1.09	1.19	1.42
Liver cancer	1.19	1.40	1.81
Female breast cancer	1.25	1.55	2.41
Hypertension	1.43	2.04	4.15
Ischaemic heart disease	0.81	0.87	1.13
Ischaemic stroke	0.90	1.17	4.37
Haemorrhagic stroke	1.19	1.82	4.70
Liver cirrhosis	2.90	7.13	26.52
Chronic pancreatitis	1.34	1.78	3.19
Injuries and violence	1.12	1.26	1.58

Table recreated from the CMO Alcohol Guidelines Review report (30)

In addition to the risks of alcohol consumption, it has been suggested that there is a protective role of low-to-moderate alcohol consumption on certain diseases such as ischaemic heart disease, ischaemic stroke, hypertensive disease and diabetes mellitus (type 2 diabetes) (31). However, the presence of heavy drinking occasions among low-to-moderate drinkers is associated with an increased risk of ischaemic heart disease and stroke. The relationship between alcohol consumption and hypertensive disease is also more complex, with an overall detrimental dose-response relationship observed for males, whereas among females, moderate alcohol consumption appears to have a protective effect. Rehm (31) highlighted that the evidence in this area is ambiguous and suggested that higher rates of binge drinking among males could potentially explain the absence of a protective effect of moderate alcohol consumption in males. It is important also to note the methodological

biases that may exist in these studies. Perhaps most important is the failure to separate lifetime abstainers from current abstainers in the reference groups (30) (although a more recent meta-analysis which used lifetime abstainers as a reference category reported low-to-moderate consumption was still associated with a reduced risk of cardiovascular outcomes (33)), but also not controlling for other lifestyle and psychosocial factors that may influence cardiac risk (such as diet, exercise and social status), and age of cohorts (with potential benefits only seen in those over 40 years of age in one large cohort study) (30).

A recent global study, using 694 sources of individual- and population-level alcohol consumption and 592 studies on the risk of alcohol use, disputed these findings (34). After calculating improved estimates of population-level alcohol consumption and adjusting for former drinkers being included in the abstainer category, a statistically significant J-shaped curved (indicating reduced risk of disease at lower alcohol intakes) was only found for ischaemic heart disease. The minimum relative risk was 0.86 (0.80–0.96) for men and 0.82 (0.72–0.95) for women, occurring at 0.83 and 0.92 standard drinks daily for men and women, respectively. Further to this, the study also explored the relative risk of alcohol on all alcohol-attributable causes of ill-health and found that the risk rose monotonically as the number of alcoholic drinks consumed daily rose, with any protective effects being offset by the risks associated with cancers. The authors concluded that the level of alcohol consumption that minimised harm across health outcomes was zero (95% UI 0.0–0.8) standard drinks per week. Accounting for the potentially protective effect on ischaemic disease, Rehm et al. (35) also calculated that the absolute risk of dying from an alcohol-attributable cause, including liver cirrhosis, cancers and cardiovascular disease, as well as intentional and unintentional injuries, increases with increasing daily alcohol consumption beyond 10g per day. Any

protective effects of moderate alcohol consumption only applied to cohorts with overall low levels of consumption with no binge drinking occasions or variation in patterns of drinking.

2.2.2 Health impacts of binge drinking occasions

Binge drinking is a pattern of drinking which has received a lot of interest in both the public (36), political (37) and academic worlds (38, 39). There is no consensus on the definition of binge drinking, with varying cut-offs used within the literature measuring drinking behaviour (12, 40-45), including but not necessarily limited to: 5 or more drinks on one sitting; 8 or more units on one occasion; and 8/6 or more units on one occasion for males/females. Other terms have also been used to describe this pattern of drinking, including heavy episodic drinking (HED) (46) and risky single occasion drinking (RSOD) (47). As described above, binge drinking plays a role in the development of alcohol-related diseases, notably that irregular but heavy drinking occasions cancels out any cardio-protective effects when typical drinking pattern is low-to-moderate (10). Experimental data in animal models have shown that repeated episodes of binge drinking intensify liver injury (48). Further, raised markers of harmful drinking on the liver have also been observed in humans after single binge drinking occasions (49). This is in agreement with epidemiological data that suggest repeated episodes of binge drinking are associated with liver injury (48, 50), and the drastic increase in liver disease and death observed in recent years has been attributed to a rise in heavy alcohol consumption (48). However, compared to chronic heavy drinkers, the relative risk of irregular heavy drinking occasions on liver disease is lower (50) and there may be additional lifestyle factors involved in the toxicity of the liver, such as smoking and obesity (51).

Acute alcohol consumption and intoxication is also a leading risk factor for mortality and morbidity relating to intentional and unintentional injury, including injuries from road traffic

crashes, burns, poisoning, falls, drowning and violence against oneself or others (52). Taylor et al. (53) found that the risk of death from injury increases as the lifetime number of drinking occasions and number of drinks per occasion increases. For example, drinking more than three drinks, thrice weekly results in a lifetime mortality risk of 1%, although this level of risk can also be achieved by drinking more drinks on fewer occasions or fewer drinks on more occasions. The risk was significantly higher for men and women when drinking more than twice a month; drinking more per occasion also resulted in a higher lifetime injury mortality risk when drinking at the same frequency. These findings suggest that heavy, episodic drinking increases the risk of death from injury and that doing so more often further increases this risk. However, basing risk estimates on usual consumption patterns does not capture the influence of alcohol on a single episode of injury or whether consumption actually occurred prior to the injury. In a meta-analysis study using high-quality, real-world epidemiological studies, Taylor et al. (54) calculated dose-response curves between alcohol consumption and the subsequent risk of different injuries (motor-vehicle and non-motor-vehicle: falls, intentional, unintentional). They reported that the risk of injury increases non-linearly with increasing alcohol consumption. Separate analyses for motor vehicle and non-motor vehicle injuries highlighted that non-motor vehicle injuries also have a greater proportional per-drink increase in risk. For every 10g (1.25 unit equivalent) increment in consumption, the OR increased by 1.24 (95% CI: 1.18–1.31) and 1.30 (95% CI: 1.26–1.34) for motor vehicle incidents and non-motor vehicle incidents, respectively, with the highest increase in odds seen for intentional injuries (OR 1.38, 95% CI 1.22-1.55). These findings led the authors to recommend drinking less than 2 drinks per occasion to reduce the risk of injury. Gmel et al. (55) further raised questions about the type of drinker that mostly account for alcohol-attributable injuries and distinguished that heavy episodic drinking is more strongly related to injury than usual volume of drinking, which many previous studies had failed to consider. In their study of 3,659 patients in a Swiss hospital emergency department,

they found that risk of injury not only increased with the amount of alcohol consumed beforehand, but also that compared to abstainers, those who typically drank in low levels but engaged in irregular heavy, drinking occasions were at a higher risk of injury (OR 7.38, 95% CI 2.57-21.22 (females); OR 6.38, 95% CI 3.75-10.86 (males)) than chronic heavy drinkers (OR 4.43, 95% CI 22.21-8.89 (females); OR 3.32, 95% CI 2.24-4.92 (males)) at the same level of pre-attendance drinking (4/5+ drinks in the 24 hours before attending the emergency department for females/males).

2.2.3 Social harms of alcohol consumption

Additional to the impact upon morbidity and mortality, there are numerous social consequences arising from excessive alcohol consumption to the individual drinker as well as those around them. The social consequences can include social and economic costs to society, as detailed **on page 14**. At the individual, family and community levels, social consequences can include family or relationship problems, interpersonal relationship violence (IPV) (10), problems with the law (56), and harms to the health and wellbeing of drinkers' family or friends (57). Harmful or hazardous drinking particularly is a major contributor to IPV, including acts of physical aggression (hitting, kicking), psychological abuse (intimidation, belittling and humiliation), forced sexual inter-course and other controlling behaviours (restricting access to family and friends, assistance or information) (58). Drinking is also associated with absenteeism (sickness absence from work (59)) or loss of earnings/employment from long term sickness (60). A literature review examining the evidence on alcohol use-sickness absence found that short- and long-term sickness absence from work was associated with several measures of drinking, including a higher frequency and quantity of drinking, binge drinking, and problem drinking. Although this review highlights the association between alcohol consumption and sickness absence, the lack of

longitudinal data and heterogeneity in study design precludes examining causal associations or conducting a meta-analysis to test the strength of the association (59). Consequences also reach out into the community, with drunkenness, alcohol-related public disorder and littering perceived to be a problem in areas in which people live and socialise in the UK (61-63).

Further to this a number of studies have found a range of social consequences attributed to drinking among young people. These include engaging in unplanned sexual activities and unprotected sex, damaging property, getting into trouble with authorities, having arguments with friends, drink-driving and getting hurt or injured (64, 65). In a sample of 5,990 Swiss young men (mean age 20, SD 1.23), daily and weekly risky, single occasion drinkers reported experiencing more negative consequences (including unsafe sexual intercourse, blackouts, general misconduct, injuries, conflicts with the police, fighting and damaging somebody else's property) compared to those who abstained or who had not engaged in RSOD in the previous year (66). In a sample of 2,548 university students in New Zealand surveyed in 2006, of which 68% reported recent hazardous drinking (according to the AUDIT-C questionnaire) and 37% had engaged in binge drinking in the previous seven-days, a variety of drinking consequences were reported in the previous 4 weeks (64). The most common problems arising from drinking included having a hangover (55%), blacking out (33%) and vomiting (21%). 12% of students reported getting into arguments, 5% reported physical aggression, 15% reported having unprotected or regretful sexual intercourse and 5% reported vandalism. No associations were made between different measures of drinking and related consequences, although the majority of the population had AUDIT scores which indicated recent hazardous drinking. Further, in a large US study of young adults at university in the 1990s, binge drinkers, particular frequent binge drinkers, were more likely than other

students to experience alcohol-related problems (65). Many students have also reported academic problems as a result of their drinking including missing classes, being unable to concentrate and a negative impact of drinking on their learning and/or grades (67). In addition to this, binge drinking has a range of negative consequences upon non-binge drinkers and abstainers, including being a victim of unwanted sexual advances or sexual assaults, taking care of drunken friends, and being interrupted whilst studying or sleeping (65).

2.3 Alcohol consumption in the UK

The most recent data on drinking habits in the United Kingdom come from the 2017 Opinion & Lifestyles survey (OPN) (68). A monthly omnibus survey, this collects self-reported alcohol consumption data through face-to-face interviews with a weighted sample of the population aged 16 years and over (n=7,100 in 2017). The OPN only measures alcohol consumption on the participants' heaviest drinking day in the week prior to interview, so cannot capture drinking frequency or total alcohol consumption across a specified time period, but gives an insight into the populations' drinking habits. The following figures from the OPN relate to this latest survey's findings.

Since 2005, when this time series survey began, the proportion of respondents who drank alcohol in the week prior to interview has declined from 64.2% to 57.0%. A similar reduction in the number of adults drinking on five or more days has also been observed over this period, from 16.8% to 9.6%. The proportion of respondents who reported that they were teetotal (did not drink alcohol at all) has increased since 2005 from 18.8% to 20.4%. These changes have been suggested to be due to changes in culture and ethnicity (13) or healthier

lifestyles (69). Teetotalism was also lower among those who are of white ethnicity (15.8%) compared with all other ethnicity groups (50.6%). Teetotalism has increased the most among those aged 16 – 24 years and 25 – 44 years, although those in these age categories are also most likely to 'binge' on their heaviest drinking day (defined as males exceeding 8 units and women exceeding 6 units), with the highest proportion among 16 – 24 year olds (43.0% men and 42.0% women). This is compared to an average of 28.7% and 25.6% of men and women, respectively, among adult drinkers of all ages.

Those who work in managerial and professional occupations were also more likely to have drunk in the past week (69.5%) compared to those in routine and manual occupations (51.2%); and as income increases, higher proportions of the population report drinking in the past week. Among those in the highest income band, over £40,000 per annum, 78.9% adults drank in the past week compared to 46.5% adults in the lowest income band, under £10,000 per annum. This is likely to be associated with other characteristics, such as age. For example, lower numbers of 16 – 24 year olds are in managerial and professional occupations, for whom drinking is less common. However, the 2016 OPN also reported that those in the higher income bands were two times more likely to binge drink on their heaviest drinking day (21.8%) compared to the lowest earners (10.7%) (13).

The OPN data is limited in that it cannot demonstrate how the population is drinking against the current low-risk guidelines. Since 2011, questions about usual weekly alcohol consumption were added to the Health Survey for England (HSE), a population-level survey designed to monitor national health trends. The latest survey (23) presents data on self-reported weekly alcohol consumption (using a seven-day drinking diary) and maximum alcohol consumption on any day in the past week among a sample of 8,011 adults aged 16

and over. To reflect the recent change in low-risk drinking guidelines, the HSE amended the estimated weekly alcohol consumption for men to show the proportion drinking above 14 units per week. In 2016, 26% of men and 12% of women were reported to drink a level indicating an increased risk of harm (more than 14 units, and less than 50/35 units per week for men/women); with 5% men and 3% of women drinking at higher risk levels (more than 50/35 units per week for men/women). Since 2011, whilst there was no statistically significant change in the average weekly consumption of alcohol by men or women (16.0 units for men and 9.1 units for women in 2016), the proportion adults drinking at increased or higher risk of harm has decreased slightly from 34% to 31% of men, and from 18% to 16% of women.

The Alcohol Study Toolkit (ATS) is the newest population-level survey set up to provide timely tracking of alcohol-related behaviours in order to inform and evaluate national alcohol-control policies in England (70). The series of monthly, cross-sectional surveys track national patterns of alcohol consumption using the AUDIT questionnaire, attempts to reduce or cease alcohol consumption, and exposure to health professional advice on alcohol, following respondents up after six months. Similarly to the above population-level surveys, it uses self-reported data from adults aged 16 and over. Trends in alcohol consumption between March 2014 and January 2016, comprising data from 38,732 individuals, showed that differences in alcohol consumption patterns across the year were relatively stable with slightly lower consumption and binge drinking in the summer months (71). The average population prevalence of abstainers was 33.1% (higher than that reported in the OPN and HSE), with 25.3% classified as higher risk drinkers, and 10.4% regularly binge drinking (at least weekly); hazardous drinking was not reported. Differences in the proportion of abstainers in the ATS compared to OPN and HSE are likely due to the difference in classifying

abstainers, with the ATS combining those who 'never' drank alcohol together with those who did so 'monthly or less'. Although direct comparison between AUDIT scores and the low-risk drinking guidelines for the UK should be taken with a degree of caution, since AUDIT takes into account typical drinking rather than drinking over a specified period of time and the low-risk guidelines were not developed in line with AUDIT, similar proportions of higher-risk (according to the ATS) and increasing risk drinkers (according to the OPN) are observed. Unfortunately, the HSE and ATS do not provide alcohol consumption data by age, so it is not possible to compare the OPN findings of higher proportions of binge drinkers among 16 – 24 year olds to these.

Higher proportions of adults of all ages binge drinking were reported in the OPN (just over one in four adults) compared to the ATS (one in ten adults); this is perhaps due to the difference in the reference period that each survey used, as described above. Another possible explanation is that the lack of specific reference period as well as the classification of regular binge drinking being 'at least weekly' in the ATS means it is not specific enough to capture the true binge drinking prevalence and may miss infrequent binge drinkers e.g. those who binge 2-3 times a month or less. Additionally, it has been suggested that the OPN's use of a shorter reference period of 'past week' is not sufficient enough to capture frequency of binge drinking and so the figures provided by both these surveys are likely to underestimate the proportion of heavy drinkers and miss infrequent binge drinkers (72) who are also at risk of harm. Further, alcohol survey data has been found to substantially underestimate alcohol consumption taken from alcohol sales data (73) and is likely underestimating the proportion of adults who drink above the UK guidelines and engage in binge drinking occasions (74). Taking this, the above data and harms of alcohol consumption into account demonstrates a clear need for a reduction in alcohol consumption in the UK. Addressing excessive alcohol

consumption has therefore been a key area of focus in several national public health policies, the most recent being the current UK Government's 2012 Alcohol Strategy (12) that set out proposals "*to reduce the number of people drinking to excess*".

2.4 Drinking in adolescence, young adulthood and beyond

As reported above, young adults are more likely than any other age group to binge drink on their heaviest drinking day in the past week (68). However, a recent report (75), which analysed data from the Smoking, Drinking and Drug Use among Young People in England survey from 1988 to 2016 and the Health Survey for England from 2001 to 2016 has found that young people are now less likely to drink, and among those who do drink, they start drinking later, less frequently and in smaller quantities. The Youth Drinking in Decline report (75) also noted that against a decrease in the proportion of young adults (aged 16-24 years) drinking this suggests that some young people are not simply delaying the initiation of alcohol use or excessive alcohol use but that there may be a sustained generational shift in drinking behaviour. The authors of this report acknowledge, however, that this decline may not be consistent across all subgroups of adolescents and young adults, and recommended ongoing monitoring and interrogation of such trends to understand if it is maintained, to identify signs of the trend reversing as well as understand if and how it is occurring across different social groups (75). Examination of drinking behaviours, along with an exploration of the (drinking) culture, of different social groups is therefore important and warranted. As will be presented in the next section, university students are a social group where high levels of drinking have been recorded and examining how drinking changes from adolescence at home to young adulthood away from home forms an important part of interrogating trends in drinking behaviour. Further, given the evidence in the Youth Drinking in Decline report

that many young people may simply be delaying the initiation of drinking to later adolescence (75) means that the transition to University could be an even more important time to consider in the establishment and/or development of drinking behaviour. Studying the transition point will help to pinpoint opportunities to intervene so that this high-risk population is not overlooked in the face of declining alcohol consumption among young adults across the UK.

There is evidence to suggest that drinking in mid and late adolescence persists into young adulthood and is not just an adolescent phase. McCarty et al. (76) measured the drinking behaviour in a cohort of 2387 US adolescents aged 17-20 years and followed them up at 30-31 years to determine the extent to which harmful amounts of alcohol use (defined as more than 4/2 standard drinks per day for men/women) and binge drinking (6 or more drinks on at least one occasion in past month for men and women) in adolescence were associated with harmful and binge drinking in adulthood. Whilst harmful drinking in adolescence was only significantly associated with harmful drinking in men and not women at aged 30, binge drinking in adolescence increased the relative risk (RR) of binge drinking aged 30 to 2.3 and 3.4 for men and women, respectively. Half of men and a third of women who binge drank at age 17-20 continued to do so at age 30. Whilst this suggests that problem drinking during adolescence, and at the age of attending university/college, is associated with problem drinking in adulthood, it is pertinent to acknowledge that this was in a sample of US adolescents for whom drinking was not yet legal (21 years and above is the legal drinking age in the US) and so may not be generalizable to the UK, where the legal drinking age is lower.

There is a dearth of longitudinal data from the UK looking at the trajectory of drinking in later adolescence, when drinking is legal, to adulthood. Most have followed individuals from mid-

adolescence to adulthood. Cable and Sacker (77) found that frequent heavy drinking (defined as drinking 4 or more units per day, 2 days per week or more) at age 16 increased the odds of alcohol abuse (as measured using CAGE) at age 30 among both men (1.62 (95% CI 1.07–2.45)) and women (1.63 (95% CI 1.16–2.30)). Further, the likelihood of misusing alcohol at age 30 was predicted to be similar for infrequent and frequent heavy drinking in men at age 16, but was just limited to frequent drinking (in light and heavy quantities) women at age 16. With a smaller sample of women who were infrequent heavy drinkers in this study, however, the statistical power may have been insufficient to detect an effect. Further, Viner & Taylor (78) found that both binge drinking and frequent regular drinking at age 16 independently predicted a higher risk of alcohol use problems at age 30, including alcohol dependency, alcohol abuse and excessive regular alcohol consumption. While binge drinking also predicted a higher risk of adult convictions, accidents, school exclusion and lower risk of attaining high adult social class, habitual frequent drinking was associated with higher adult social class and higher risk of adult illicit drug use. This highlights that whilst different patterns of drinking in mid-adolescence increases risk of later social, educational and socioeconomic adversity, it is still a risk behaviour for continued excessive alcohol consumption into adulthood.

The lack of longitudinal data exploring the association between drinking behaviour among older adolescents in the UK and later drinking outcomes means that the importance of drinking at this stage, when heavy drinking is thought to rise (79) and considered a normal part of the life stage (80), on the continuation or change in drinking patterns and related harms into mid-to-later adulthood among a large subgroup of the population is less clear. Marshall (81) highlighted the clear need for high-quality long-term prospective cohort studies to investigate the long-term consequences of adolescent drinking, and given the

evidence of UK university student drinking behaviour (this is discussed further below) it should include this trajectory. The increase in the amount of alcohol that todays' adult drinkers (the 'baby boom' generation) drank in their formative years, compared to previous generations, is suggested to be linked to alcohol becoming more affordable and acceptable (82). The latest ONS drinking data shows that over thirty percent of men and women aged 25-44 years (32.2% and 35.6%, respectively), and 29.5% men and 22.7% women aged 45-64 years, reported bingeing on their heaviest drinking day in the past week (68), suggests that these drinking habits developed when younger have persisted into later adulthood (82).

These findings highlight that there is a need to consider the life-stages when drinking patterns may be developing, such as the transition to adulthood, when determining appropriate responses to excessive alcohol consumption. The next section will go on to discuss young adulthood and the drinking behaviour of young adults whilst at university, to highlight that the transition to university is an important stage to consider in the development of drinking habits.

2.5 Alcohol consumption and university

2.5.1 University as a life-stage in drinking behaviour

Seaman and Ikegwuonu (80) highlighted how trajectories to adulthood are not the same for all and that differences in the socio-economic experiences of this age group may result in different experiences with drinking and how long these experiences play out. A notable difference is those who continue into higher education and those who enter the labour market. They highlighted the importance of considering the different trajectories to

adulthood rather than taking a universal approach, whereby all young adults are considered to journey down the same path in relation to alcohol. Understanding the subgroup processes that lead to different experiences with alcohol will contribute to a fuller picture of how young adults drink in the trajectory to adulthood, understand the social context of drinking, origins and consequences of alcohol problems, and identify potential areas to prioritise, such as where to guide prevention or treatment programs (79).

One route to adulthood that can be considered is through university. Merrill (83) argued that this life-stage is unique as entry into university coincides with emerging adulthood but is characterised by a delay in entry into traditional adulthood (marriage, parenthood and/or employment) that may have implications for alcohol use and misuse. The continuation of a formal education sees students occupy a transient stage where they are neither adolescents nor fully fledged adults (1), and delays the 'maturing out' process accompanied with a decrease in drinking that has been observed with the onset of traditional adulthood (79, 80), although evidence provided in the previous and next sections suggest this decrease may not always be the case. The number of entrants to full-time first undergraduate degrees in the UK has increased considerably over the past decade, with nearly 500,000 students now entering each year. Full-time young undergraduates entering their degree for the first time comprise the greatest proportion of students entering university in the UK (84), with a high demand for higher education among 18-year olds. The UK government's alcohol strategy acknowledges the importance of universities in playing a role to reduce excessive drinking among young adults (12), recommending a combination of alcohol education, environmental measures to prevent overly promoting drinking, and supporting research into social norms campaigns to counter misperceptions of how much peers really drink.

2.5.2 Student alcohol consumption in the UK

Student drinking is not a new concept in alcohol research. In 2002, Gill (85) reviewed UK student drinking behaviour across the preceding 25 years, noting the high levels of drinking within this population. In this review, studies that reported the proportion of students who had exceeded the UK 'sensible drinking' guidelines were compared to the proportions of 16 – 24 year olds in the general population exceeding these guidelines (as measured by the 1998 General Household Survey (GHS) (86)). Although direct comparison should be taken with caution, given the differences in when and how consumption data was collected within and between the various studies and the GHS, Gill concluded that both males and females at university were more likely to exceed the drinking guidelines compared to their peers in the general population. Similar findings were also reported for the proportion of university students binge drinking compared to 16 – 24 year olds in the general population. Kypri et al. (87) reached similar conclusions in their comparison of the 2002/3 New Zealand Health Survey and an internet-based survey of university students conducted in 2002, both using the AUDIT tool. They found that the prevalence of hazardous drinking was nearly twice as high among students (65% students had an AUDIT score >8, compared to 36% of 18-23 year olds in the general population), while harmful drinking (AUDIT score >15) was three times as prevalent (31% students vs. 9% general population).

An update to Gill's review examined alcohol consumption among university students in the UK and Ireland between 2002 and 2014 (88). These studies varied in their methodological approaches and findings, using a range of alcohol screening tools, sampling strategies and drinking measures which makes it difficult to directly compare the results. Most employed the AUDIT or other alcohol harm screening tools (89), or measured quantity of alcohol consumption (in units or binge episodes) in the past week or past month. Among those

employing the AUDIT tool, the proportion of students reporting hazardous alcohol consumption ranged between 60.6% and 84% (90-95). There is no discernible pattern between the studies which found higher proportions of hazardous drinkers to those who found slightly lower proportions. In a 2014 study of 2048 university students (academic years of study not disclosed), 84% were classed as hazardous drinkers (95) in comparison to a smaller 2010 study of 458 first and second year undergraduate students, where 82% were classed as hazardous drinkers (92). The sampling methods were quite distinct in these two studies, with the first directly targeted students who played sports, and the second which sampled students from two separate university faculties and handed out questionnaires during lectures where permitted by the respective lecturer. Conversely, in a 2011 study purposively sampling first to third year undergraduate students who participated in university sports, totalling 770 students across seven universities, 60.6% students were classed as hazardous drinkers (93). In 2012, Gunby et al. (94) reported 71.2% participants were hazardous drinkers in a sample of undergraduate and postgraduate students at a single university (N=1110). The variety of sampling procedures and sampling frames within the various studies is likely to have given rise to variability in the findings but together highlight the high proportion of students drinking in a pattern that puts them at increasing risk of harm.

Among the studies which measured the number of alcohol units consumed in the past week, variability in those exceeding the sensible weekly limits (according to the previous sensible drinking guidelines) is also observed. In a small study of 186 first year nurse and midwifery students, 74% of participants reported exceeding the weekly guidelines (42). In comparison, a larger study of 731 students reported 51.3% men and 47.5% women exceeded their weekly guideline (96). In a study not included in the above systematic review as it incorporated a

longitudinal element, Bewick et al. (97) explored the weekly alcohol consumption of students in different years of study. Their sample comprised a much larger population of 5895 students, although these data were collected over a long period between 2000 and 2006 and they reported slightly lower proportions of students exceeding the weekly limits. Of students in their first year of study, 50% exceeded the 21/14 threshold, compared with 42% of students in their second year and 32% of those in their third year of study. Of importance to note in the above studies is that they measured the proportions of students exceeding the former 'sensible drinking' guidelines and so will underestimate the proportion of males exceeding the low-risk weekly limits.

Although Bewick et al. (97) reported that students in their first year consumed significantly more units of alcohol than older students, when a smaller sample of first year undergraduates were followed up into their second and third years, those who drank above the guidelines in year one were ten times more likely to be doing so in their final year (compared to those who did not). This suggests drinking behaviour in the first year of university is associated with drinking behaviour in the later stages of university. Another similar, more recent, study of 3706 students across seven universities in the UK found no difference between year of study for frequency of drinking and binge drinking (98).

Among those measuring binge drinking, there was variation in the way that this pattern of drinking was defined, an additional issue when comparing the findings of these studies. Definitions included: 5 or more drinks in one sitting; 5/3.5 pints of beer or 10/7 shorts or 10/7 glasses of wine on one occasion (for males/ females); 8 or more units on one occasion; and 8/6 or more units on one occasion (for males/females). Studies measuring the prevalence of binge drinking in the past week among undergraduate students reported

proportions of 52.6% to 85% (40-42, 99). El Ansari reported that 59.2% of students had engaged in a heavy, episodic drinking session in the past two weeks (43) and two studies measuring binge drinking in the past month reported prevalence's of 79.6% and 82.3% (44, 45). The former also looked at the frequency of binge drinking and found over half of the sample binge drank on at least a weekly basis or more frequently.

Despite the differences between these studies in their sampling procedures and methodology used to measure drinking behaviour, there is a clear consensus that there are high proportions of undergraduate students drinking above the low-risk guidelines and engaging in heavy, episodic drinking. Despite population surveys noting a decrease in the proportion of young adults drinking over recent years, high levels of alcohol consumption are still taking place among students at university (88). Two small-scale cohort studies in the UK following the drinking behaviour of students whilst at university and in the year after graduation suggest that drinking practices whilst at university also continue into adulthood. A cohort of 122 medical students found that mean alcohol consumption was higher in the year following graduation compared to the second and fifth year of study (100). The proportion of students drinking above the recommended weekly unit guidelines (according to the former sensible drinking guidelines) increased significantly across the four years. Using the same survey, a cohort of dental students were found to have lower mean alcohol consumption in their fifth year of study compared to their second year of study, but this increased in the year post-graduation (101). Although the sample size for these studies was low, no longitudinal associations were explored between drinking at university and drinking after university, and the students were not followed up past their first year of graduation, they highlight a potential concern that students may continue excessive drinking practices after leaving university. In the US, an increase in heavier drinking and associated problems

have been reported upon the transition to college (102). Among those attending 4-year colleges (the typical length of a bachelor's degree in the US) compared to those who attended 2-year college and non-college groups, the highest levels of drinking were found after age 20 compared to those who did not, although this was only found for Caucasian students (103).

What studies on drinking at university do not tell us, however, is when these drinking patterns are established and developed. When looking at drinking behaviour among adolescents in the UK, it appears that many drink and/or engage in binge drinking. The Smoking, Drinking and Drug Use among Young People Survey (SDDUYP) measures self-reported lifetime and past seven-day alcohol intake of 11-15 year olds in the UK. In 2016, 24% of 15 year olds had consumed an alcoholic drink in the past week, and 23% had been drunk at least once in the past month (104). In a 2014 review of drinking trends among underage drinkers in the UK, Healey et al. (105) highlighted findings from The European Survey Project on Alcohol and Drugs (ESPAD), which found that 50% boys and 54% girls aged 15-16 years from the UK reported drinking more than 5 drinks on a single occasion (it is not clear whether this was the percentage of 15-16 years old who had ever drunk this much on a single occasion or on a more regular basis). Armitage (106) measured the proportion of adolescents at two secondary schools in the UK who engaged in binge drinking in the past week and found 62.4% of 16-18 years olds reported doing so. It is noteworthy that in this study binge drinking was defined as drinking more than 4/3 units on a single occasion (for males/females), lower than the definitions used for adults, so this overestimates prevalence when compared to those over 18 years of age. These findings do appear to suggest that young people regularly engage in drinking and binge drinking before reaching adulthood,

however, it is not known what drinking patterns look like among young people that attend university – prior to their joining – and then how these change upon arrival at university.

Newbury-Birch et al. (107) examined alcohol consumption in a small sample of 188 medical students just before they entered university in 1998, and found that many were already drinking excessive amounts of alcohol prior to starting university life; 49% males and 43% females reported drinking above the former sensible drinking guidelines. In addition, 27% males and 14% females reported binge drinking, defined as exceeding half the weekly guidelines on a single occasion, although they did not report a reference period so it is not clear how frequently students engaged in binge drinking prior to university. This study suggests that excessive drinking may be established prior to university, especially among males given that their drinking behaviour in this study was assessed according to the previous drinking guidelines. However, it was conducted on a small population of medical students twenty years ago, limiting its generalisability and relevance to current student drinking behaviour. Students' alcohol consumption was also not followed up whilst at university so it is not clear whether the transition resulted in any changes to drinking behaviour. A recent intervention study, which aimed to assess the efficacy of an online health behaviour intervention targeting incoming first year undergraduate students included measures of drinking behaviour among 1,445 students two-weeks prior to university, and at one- and six-month follow up (108). This study reported small increases in average unit consumption in the past week (from 11.9 to 13.9 units per week for control; 11.2 to 12.6 units per week for intervention participants) and average number of days binge drinking (from 1.0 to 1.3 occasions for both controls and intervention participants) at the one-month follow up, indicating possible changes in drinking behaviour upon arrival to university. For both groups, average units consumed in the past week remained higher at the six-month

follow up (13.4 units and 13.0 units for control and intervention participants, respectively), although average binge drinking reduced slightly to 1.2 occasions in the past week, for both control and intervention participants. In the context of an intervention study, it is possible that reporting of alcohol consumption may have been affected by students' knowledge that they were being followed up. Further, the use of past-week may not have been sufficient to detect changes in the frequency of binge drinking (72); however, the increase in weekly alcohol consumption and binge drinking occasions warrants further investigation into how drinking behaviour may change at this transition point.

Understanding what drinking patterns look like prior to and then upon arrival to university will help to understand whether drinking patterns develop or are established prior to arrival, or at, university. As highlighted above, there is currently not enough evidence on what a pathway into drinking may look like for young adults in the UK and the transition to university could be a key point for changes in drinking behaviour. This may have implications not only the short-term but also translate into unhealthy drinking practices beyond university and impact upon their health in later life. Additionally, as many become parents, these practices may influence the next generation (109). Gaining more insight into whether and how drinking may change at this point for a large subset of the young adult population in the UK is therefore warranted.

2.5.3 The transition to university: freshers' week and beyond

One such period that is important to capture is the first week of the university year, which was identified by Gill in their review of student drinking behaviour as a potentially influential time on young adults' drinking behaviour with newfound freedom from parental supervision, but also potential stresses associated with new academic requirements, living away from

home and peer pressure (85, 110). In the UK, the first week of university is known as freshers' week and is primarily an induction week for students to acclimatise to their new academic and social environment (111, 112). Anecdotal evidence suggests that higher levels of drinking take place during freshers' week, although to the author's knowledge there are currently no published studies in the UK which have examined drinking behaviour during this period. Higher rates of drinking during freshers' week have been observed among undergraduate students in New Zealand (113), which has the same legal drinking age as the UK and where high levels of binge drinking and hazardous drinking (as measured by AUDIT) have also been recorded among university students (64). In 2015, Riordan et al. surveyed 143 first year students about their alcohol intake prior to joining university, during fresher's week and throughout the academic term. Not only did students report drinking the highest number of standard drinks during freshers' week (mean 26.0, SD 28.6), compared to before entering university (mean 13.1, SD 13.6) but higher rates of drinking during this week was also associated with higher rates of drinking in the subsequent year, after controlling for pre-university drinking. Despite the small sample size, similar findings were obtained in a later study with a larger sample (N=552), although this comprised students in their first, second and third years of study (114). This suggests that freshers' week is an influential time in determining students' drinking behaviour throughout the university year and warrants further investigation into the drinking behaviour of students in the UK during and after freshers' week, as well as into the potential influences on drinking behaviour during this period. Recent evidence pertaining to the freshers' week period is discussed further in **Section 2.6** on the young adult drinking culture.

Studies in the US have observed variability in the proportions of students binge drinking throughout the academic year, with spikes and troughs in heavy drinking observed for

certain days of the week (weekend days more than week days), university calendar-specific events (such as the first few weeks of university, end of the year "festival week" and Halloween), or academic requirements (115, 116). These highlighted the need for universities to identify activities on and off campus that are linked to high levels of drinking in order to direct efforts appropriately to result in the greatest reductions in drinking (115)). Another US study where students' daily alcohol consumption was tracked through the academic year identified five clusters of drinking patterns, according to the quantity of alcohol they consumed (low, medium or high) and when in the week they drank (weekend drinkers vs. week day drinkers) (117). They concluded that interventions targeting weekend drinkers, such as policies monitoring on campus events and weekend drinking, would miss those who drank heavily during the week. These findings from the US highlight that understanding how (or whether) drinking behaviours change across an academic year, in addition to the transitional stage, will not only help better understand how drinking behaviour develops, but also give insight into whether there are particular times or events across the academic year where efforts to target excessive drinking should be focused.

2.6 Young adult drinking culture

This section introduces some of the influences and drinking practices of adolescents and young adults covering the influence of peers, normative behaviour, the young adult drinking culture and social environment at university.

2.6.1 Peer influence and normative behaviour

In the time of emerging adulthood, Arnett (118) proposed several features of this time that may explain why alcohol use is highest. Notably, it is a time of instability as young adults move away from the parental home who then have less influence over their behaviour. With a heightened focus upon oneself, an opportunity to rebuild their social identity, and tenuous friendships until established in their new university or workplace, Arnett suggested that during this time young adults may also be more susceptible to peer influence. Peers attitudes and behaviours continue to be suggested to have an important influence on young people's alcohol use, more so than other influences, such as how drinking is portrayed to young people in the media (119). Peers can influence drinking behaviour both directly (for example, offering or encouraging a drink) and indirectly (for example, through modelling others behaviour, or individuals' perceived norms of how much others drink) (120). Both the social context of drinking and perceived norms have been linked to alcohol consumption (121, 122).

Research on modelling (imitating another's behaviour) shows that participants exposed to heavy drinkers will consume more than those exposed to light- or non-drinkers (120). In experimental studies situated in a naturalistic drinking setting, adults have been shown to imitate and be influenced by the drinking behaviour of both strangers and social acquaintances (123, 124). In such experiments, participants are grouped into pairs within a bar setting where one (the confederate participant) is asked to consume only alcoholic or non-alcoholic drinks, whilst the other (the naïve participant) is unaware of the drinking instructions. Dallas et al. (123) found that in these conditions the number of alcoholic drinks selected by the naïve participant was significantly greater in the pair where the confederate was consuming alcoholic drinks, and most were unaware that their partner had influenced

their alcohol consumption. Larsen et al. (124) also found among paired participants who did not know each other, imitation of alcohol consumption was present among both same-sex and mixed-sex pairings, demonstrating that peer influence is not limited to particular gender groupings. These findings are of relevance to new university students, as they will be entering a new environment surrounded by new people who will then become their peers and potentially long-term friends. The notion that they could be influenced by strangers and friends highlights the importance of studying their experience with alcohol when transitioning to university and across the year.

Peer influences on drinking also come through direct offers to drink, which may or may not be coercive. Qualitative work suggests that not drinking at university social events is regarded as unusual, and will result in the 'non-drinker' being offered an alcoholic drink several times (125). More socially secure students have been shown to be able to resist such offerings from their friends, however, new students looking to create friendships may be less likely to be able to do so (126, 127). Social context factors such as socialising with peers who drink heavily and membership to societies associated with heavy drinking have been associated with alcohol misuse and binge drinking among US university populations and so it is important to explore this further within a UK context (110, 120).

Finally, normative beliefs about other people's drinking behaviour, beliefs and attitudes towards drinking is thought to play a large role on drinking behaviour. Normative beliefs comprise both perceived *descriptive* norms, perceptions of how much and how often other people drink, and *injunctive* norms, perceptions of other people's approval of drinking (128). University students typically overestimate both norms, which is linked to personal alcohol use. The more someone perceives that others drink heavily and are approving of doing so,

the higher their own alcohol consumption (120, 128). The correlation between perceived norms and alcohol use is the basis of one of the most common form of interventions to reduce alcohol consumption among university students (discussed further in **Interventions aiming to reduce student alcohol consumption**) which aim to correct students' misperceptions of peer drinking. Most of the studies demonstrating the existence and effect of normative misperceptions on drinking behaviour have been mostly applied to US college students, but studies in the UK have also confirmed these beliefs also operate within UK university settings (129, 130), although the strength of the association between beliefs and drinking behaviour found in these studies differed, with more modest associations in the larger of the two (130). Qualitative research in the UK also backs up the notion of normative beliefs among young adults in the UK, showing that many young adults consider engaging in heavy drinking practices such as binge drinking to be an integral part of the emerging adult experience (131), and a norm of socialising at university (132), finding it difficult to imagine alternative social activities.

2.6.2 Drinking culture and the university social environment

2.6.2.1 Expectations of and the university social environment

As illustrated by the evidence presented in sections 2.3 through 2.5, the experience of drinking alcohol is commonplace for many adults and young people in the UK with many drinking in quantities or a pattern that is discouraged by the UK drinking guidelines. Opinion pieces in the media indeed paint a portrait of the UK drinking culture being one of excess, ingrained into everyday British culture (133) as well university culture (134), which is important to acknowledge when exploring drinking behaviour of students.

In a US study of 1,352 incoming college students, Rimal and Real (135) found that US students' had entrenched beliefs about college drinking before beginning university. These views included associating the college social experience with drinking alcohol. It is important to note, given the difference in legal drinking ages between the UK and US, the cultural relevance of the findings may limit generalisability to a UK population. However, similar findings have been drawn in UK samples. In the thesis by Brown (2016), exploring alcohol use in the transition to university (1), interpersonal and cultural influences, namely friends, family and the media, were also found to 'pre-institutionalise' students by shaping and normalising their perceptions of heavy drinking at university. In addition, before arriving at university, students were sent or saw multiple advertisements for nightclubbing events that they associated with drinking and getting drunk. This may have acted as a further influence to normalise excessive drinking prior to being a university student, particularly as attendance at these types of venues is often associated with heavy drinking (136, 137). Brown also found that once students arrived to university "*a succession of club nights"* and intense alcohol promotion by local retailers targeted students during freshers' week (1). These findings highlight how the social environment created during freshers' week at university may play an important role within the university drinking culture, but that we should not consider students' drinking experiences to be separate from the wider drinking culture. In another study exploring perceived determinants of alcohol use and misuse among university students, participants strongly perceived the lack of recreational facilities and entertainment focused away from drinking to be a key influential factor to alcohol misuse (109). This suggests that the university environment may be important in supporting a culture of heavy drinking but there is limited evidence on this in the UK, and in relation to how it changes for students as they transition to university. Looking at pre-arrival as well as the university environment would aid in identifying and separating where and when influences upon drinking behaviour arise, and opportunities to intervene.

2.6.2.2 Pre-loading

One practice within youth drinking culture is preloading, where alcohol is consumed before attending a social event where it may or may not be consumed further (138). It is not a new practice, but has been receiving increased attention in research and policy in recent years (139-141) due to its association with higher overall alcohol consumption, higher blood alcohol concentrations and rates of intoxication, as well as associated-harms such as feeling sick, assault or injury, absenteeism and passing out (83, 138, 142). This practice is widespread within youth drinking culture (140, 141) and not just student populations. It has been argued to be both structurally facilitated through 24-hour licensing, affordability of alcohol in supermarkets and off-licenses (140), and culturally facilitated through preloaders' motivation to use alcohol at home for socialising and bonding, gaining confidence by getting intoxicated before entering the night time economy, and avoid drink spiking (138, 143-145). A 2014 survey of 638 young adults in the UK found that on average males drank 9.8 and females drank 7.4 units before a night out, and the practice was associated with frequency of intoxication (143). Another survey of 380 young people in bars and nightclubs of a city centre in the UK also found those who drank prior to attending night life were four times more likely to report drinking more than 20 units on a usual night out (142). Among student populations, a 2005 study found 60% of students engaged in preloading (146), and in a more recent study of 227 students attending a commercial pub crawl event 91% had preloaded before the event began (141). At the point of interview, drinkers reported consuming an average of 10 units of alcohol (range: 1 – 40.6 units), with an estimated total consumption over the evening in excess of 16 units (range: 3 – 70.6 units).

Although such drinking practices are clearly widespread within youth drinking culture and university populations, relatively little is known about how or when these practices form and whether it forms a part of students drinking practices before they arrive to university. Given its association with heavier alcohol consumption and adverse alcohol-related consequences, this gives further reason to explore students drinking practices and experiences prior to, as they transition and across their first academic year.

2.6.2.3 Societies, sport clubs and other structured social groups at university

As highlighted in **section 2.6.1**, peers play an important role within the drinking behaviour and practices of young adults. In addition to normal friendship groups, at university there are structured social groups, known as student societies, which are unique to the university environment. Societies provide students with a range of organised extracurricular activities spanning competitive and leisure sports clubs, to cultural, religious, music, political and general interest groups. They typically require students to become members and sometimes incur a membership fee. These groups have been little studied in relation to student drinking, but growing evidence (as presented below) suggests they may be important of shaping a students' social environment and should be considered when attempting to reduce student drinking.

Studies exploring drinking behaviour among students in a range of UK university sports clubs have observed significantly higher mean AUDIT scores (mean score 11.9, SD 6.54) compared to non-sport peers (mean score 8.8, SD 7.0), more frequent and heavy drinking, and higher rates of alcohol-use disorders (79.6% classified as hazardous drinkers) compared to non-sport peers (54.5% hazardous drinkers) (147). Further, UK university students who participate in team sports have been reported to have significantly higher AUDIT scores

(mean score 13.1, SD not provided) compared to those who participated in individual sports (mean score 9.5, SD not provided) (147) and higher hazardous drinking rates (148), highlighting differences in the drinking habits and potentially influence of different types of sports clubs. 'Hazing' or initiation ceremonies, whereby older students coerce new students to drink or perform embarrassing rituals, including the rapid consumption of numerous alcohol drinks, has mostly been reported by US college studies but has been observed among UK university sports clubs (149, 150). In a survey of 162 British medical students, 75% reported experiencing some form of alcohol-related provocation from peers, much of which was experienced through initiations and during general social events by members of their sports team (149).

Evidence showing a link between membership to non-sports societies and drinking behaviour, however, is limited to the US. These are almost exclusively exploring membership to Greek fraternity and sorority societies and have consistently shown heavy alcohol use and higher levels of drinking problems (110). There are, however, inherent differences in the Greek system and UK societies, namely that Greek societies are considered a family to whom students are expected to be loyal. In the UK, on the other hand, these do not exist and students can join any number of societies they choose and are not obliged to attend all social events, and so may be less influential on student drinking behaviour compared to those in the US. In a small-scale qualitative study with first year undergraduates, student leaders and staff members at a university in the south of England, exploring the need and opportunities to address drinking behaviour among undergraduates (132), the potential influence of student leaders on younger students' drinking behaviour was raised. Among the student leaders of university sport clubs or societies who were interviewed as part of this study, many (but not all) ranked drinking as an important part of their social activities. In addition,

several staff members highlighted concerns over the promotion of and pressure to engage in heavy drinking by student reps in halls of residences, who represent a different type of structured student-led social group.

The evidence on the role of peers and membership to certain structured social groups on a young person's drinking practices suggests that student societies may influence student drinking behaviour. However little is known about such groups in the UK, particularly how students engage with these groups and their role within the university social environment. Studies one & three within this thesis seek to further understand of role of these groups, by examining the type of social events they organise and promote, and students' experiences with them.

2.6.2.4 Abstainers

An additional consideration when exploring student drinking behaviour in the transition to university and across the academic year is the views and experiences of students who abstain from alcohol. Primarily research on student alcohol use focuses upon risky drinking, binge drinking and hazardous or harmful drinking, with just a small body of research focusing upon those who do not drink at all. However, as highlighted in the OPN, approximately one-fifth of the UK population is teetotal and there has been a rise in teetotalism among young adults between 2005 and 2017 (from 19.0% to 22.8%). Along with the recent findings from the Youth Drinking in Decline report (75), this suggests that drinking patterns are changing among this subgroup of the population (68, 69). In a 2010 study which measured alcohol usage among 724 students at a university and its partner colleges in the UK, 17% of students reported they were abstainers. Although this sample included non-university peers, the greatest proportion (95.2%) were enrolled at the university. In a larger study of 3706

students across seven universities in the UK capturing drinking behaviour of students in 2007/2008, 15.6% of students reported they were abstainers (151). Although abstention was measured differently in these two studies (the former simply asked students if they drank or not, the latter classified abstainers as having not drunk in the past three months), that they found similar proportions of abstainers highlight there are many students who do not drink at university.

Drinking is thought to be an important socialisation and bonding tool for young people (152), Brown found this is of particular relevance during the transition to university in their sample of 23 first year undergraduate students (1). Additionally, at the university in this study, many of the social activities during freshers' week were linked to drinking. This suggests there may be many students who feel excluded from social experiences when transitioning to university, or may even start drinking to fit in, and face additional challenges to those who do drink. This was highlighted in a small qualitative study of eight abstaining female undergraduate students (153). For these students there was great apprehension about making friends and how others would perceive their non-drinking status, and they reported feeling judged by others for choosing to not drink. They therefore strategically managed social situations by misleading peers about being an abstainer in order to avoid admitting it. Alcohol also hindered the bonding process when attempting to make new friends, resulting in unfavourable social experiences at the start of the university journey. This was augmented by the limited opportunities to socialise where alcohol was not dominating the event. As acknowledged by the authors, although this small, homogenous sample provided in-depth exploration of females lived experiences during their first year of university, this limits the transferability of the findings. For example, it is possible that not all abstainers feel apprehensive about social drinking and therefore have a more positive university experience,

able to make the most of the social situations on offer. The authors therefore suggested that further research should continue to include abstainers' experiences of university and consider how universities can best meet the needs of abstainers, given that they may be facing additional social challenges upon the transition to university.

2.6.3 Interventions aiming to reduce student alcohol consumption

As it has been well recognised that a high proportion of students at university drink hazardously, engage in binge drinking behaviour, and exceed the weekly drinking guidelines, efforts to reduce the proportion of students drinking to excess have been implemented. These most often comprise alcohol awareness education or more targeted approaches such as social norms (also known as personalised normative feedback) interventions. Alcohol education is the standard, routine approach to reduce how much students drinks used by universities across the UK (154). It typically involves information sharing about sensible drinking, the effects and potential risks of drinking to excess, and signposting to sources of support, through promotional materials or on websites (155). It aims to reach a large proportion of the student population and empower them with knowledge about alcohol and the risks so they can make informed choices about their drinking behaviour (156). A qualitative study exploring students' views on health promotion at university found that they do value health awareness campaigns in acquiring the knowledge required to support them to be healthy (156). More recent qualitative work with students contrasts with these findings, however, with students rejecting alcohol education approaches as reminiscent of school and conflicting with the autonomy to self-regulate their own alcohol intake as an adult (154). There is also a lack of evidence to suggest such approaches positively impact upon health behaviours. A US study which assessed the effectiveness of a college-based alcohol education programme showed that despite having greater alcohol-related

knowledge (on high-risk drinking, related harms, and protective behaviours), receiving alcohol education did not mitigate alcohol-related, high-risk behaviours when compared to controls (157). A review on the evidence surrounding college student drinking prevention interventions also concluded that there is no evidence of efficacy among programmes which include alcohol education as the sole intervention component (158).

As introduced in section 2.6.1, interventions which have taken a social norms approach aim to correct students' overestimation of peers' alcohol consumption on the basis that students misperceive how their peers drink, believing they drink more than they do (descriptive norms) and perceive heavy drinking to be acceptable (injunctive norms), which in turn influence their own drinking behaviour. Social norms interventions have typically focused on addressing descriptive norms by providing normative information or normative feedback to individuals or small groups. They have taken two forms: social marketing approaches and personalised normative feedback interventions. The former uses mass communications to educate students about actual drinking behaviours among the student population and typically reach larger audiences. Personalised normative feedback interventions provide personalised feedback to individuals, pointing out the discrepancies between an individual's alcohol consumption and the actual drinking behaviours among the student population. They will often include information on money spent on alcohol, calorie intake from alcohol, the risk factors and associated consequences of alcohol misuse. This feedback can be given mailed, face-to-face as an individual or group, and via the internet on web-based intervention programmes. Trials of such interventions have mostly been undertaken in the US, although some have been trialled in other countries, including the UK, and have shown promise of effectiveness in reducing student drinking (159). They are felt to be less paternalistic than health education by providing information to students about the

predominant lifestyle choices within their peer community (160), and so do not conflict with students' wish for autonomy in the deciding what they choose to drink (154).

Following an earlier review (161) examining the effectiveness of the various ways to deliver normative feedback, which found that web-based and individual face-to-face feedback were likely to be effective at reducing alcohol consumption in the short-term (up to three months) a second systematic review was undertaken (159), considering new evidence and exploring longer term impact. This systematic review of randomised controlled trials explored whether they reduced drinking quantity and frequency, binge drinking, blood alcohol concentration, and alcohol-related problems after four months compared to no intervention, receiving an alcohol education leaflet or another 'non-normative feedback' intervention, or assessment of drinking behaviour only. 66 studies were included in the review and 59 within the meta-analyses, which spanned different countries and modes of delivery taking both social marketing and personalised normative feedback approaches. At four months post-intervention, the authors reported that there was a reduction in the standardised mean difference for all drinking measures. For drinking frequency, drinking quantity and binge drinking, the reductions were estimated as the equivalent of: a decrease of 0.19 drinking days/week from a baseline of 2.74 days/week; a reduction of 0.9 drinks consumed each week from a baseline of 13.7 drinks/week; or, 2.7% fewer binge drinkers if 30-day prevalence is 43.9%. The authors concluded that these findings showed "*no substantive meaningful benefits*" of such interventions to inform changes to current policy or practice (159, 162) as the overall strength of effects across the various drinking measures was low. However, an important final note to this study highlighted that within a broader system to preventing alcohol misuse, which also adopts environmental or developmental approaches to reducing how much students drink, social norms interventions could still have an important role.

As noted, many of the studies included in the above systematic review were not conducted in the UK. When examining personalised normative feedback interventions that have been conducted in the UK, there is promise of potential effectiveness using web-based interventions. An intervention reported by Bewick et al. (163) which provided students (n=1,036 across all years of study) with personalised feedback on their self-reported alcohol consumption (how many units they consumed per week and the associated level of health risk) and social norms information (indicating the percentage of students who report drinking less than them), found reductions in the number of units consumed in the past week. In particular, the reductions were greater as the number of visits to the intervention website increased and students received feedback more often within the 15-week intervention period suggesting that repeated reinforcement of the normative feedback message multiple is important to result in meaningful benefits. There are still some limitations to such studies, however, with higher attrition rates observed among heavy drinkers (163, 164) for whom it had less of an effect (99). In their feasibility study of a social norms social marketing campaign aimed at students living in halls of residences (n=554, representing a 15% response rate), Moore et al. (160) too found higher risk drinkers were more likely to dismiss social norms information presented on posters, drink mats, drinking glasses, meal planners and mirror stickers in their halls of residence as lacking credibility and perceived that they did not have an effect on their behaviour. Moreover, higher risk drinkers continued to perceive a typical student drinks more than average after the intervention was delivered. It is possible that as this study did not provide personalised feedback, like those using a brief intervention style do, this reduced the credibility of the messages but suggests personalised normative feedback interventions could have limited acceptability by these students who are ultimately the target group of such interventions. But again, they may still play an important role within broader prevention approaches to reduce how much students

drink. Gaining a better understanding the role of alcohol within students' lived experiences as they transition to university and across their first academic year may help in furthering such interventions and approaches.

2.7 Aim and objectives of this thesis

In light of the gaps in the existing literature discussed above, the aim of this thesis was to explore patterns of drinking, experiences with and potential influences upon drinking among first year undergraduates during the transition to university and across the first year. The specific objectives were:

1. To explore the nature of events and alcohol-related content students are exposed to by student-led groups and local businesses at a freshers' week fair;
2. To examine students' drinking patterns prior to university and across the first academic year;
3. To explore students' perceptions and experiences with drinking prior to university and across the first academic year, including both students who drink alcohol and those who abstain;
4. To explore the views of staff in student experience and welfare on the university drinking culture and how it could be addressed.

3 Nature of events and alcohol-related content in a university fresher's fair

3.1 Introduction

As discussed in the previous chapter, the first week of the academic year has been identified as a potentially influential time on a young adult's drinking behaviour. In the transitional phase of moving to university, drinking is felt to be important by university students as it is perceived to act as a social lubricant within new friendship circles (132, 165). Sports clubs and societies led by students also rank drinking highly, reporting it to be a common part of the social events they organise throughout the academic year (132). These societies have also been identified as a potential influence upon students' alcohol consumption through the provision of alcohol-related events and alcohol-related provocation (making others feel coerced or compelled to drink or drink more than intended) (149). However, little is known about how alcohol is portrayed and promoted by student-led societies, particularly at their first point of contact with new students. Experimental studies in naturalistic settings have shown that young adults imitate and are influenced by the drinking behaviour of others they know (123) and of strangers (124). Student drinking behaviour is also thought to be associated with their normative beliefs about friends' and close acquaintances' drinking habits (129, 130). It is therefore important to explore the ways in which these societies may be promoting drinking among their members.

A freshers' fair is a large marketing event that takes place during freshers' week in the UK, run by the respective Students' Union (SU) of each university. It is primarily an opportunity for student-led societies and sports clubs to promote themselves to first year students (112)

and for students to sign up be members of societies. This is the first face-to-face contact the majority of first year students will have with these societies, so represents a unique setting to explore whether and how drinking is portrayed and promoted. Local and national businesses also attend these events (112) so they can market themselves to new students, and see it as an opportunity to "*build a relationship with students*" at the start of their university careers (166). Such businesses in attendance include national restaurant chains, fashion and lifestyle brands, and local and national bars and pubs. The freshers' fair consequently represents an opportunity to see how alcohol is promoted and portrayed by these groups. This study therefore explored marketing materials handed out at a freshers' fair event by student-led societies and local businesses to: (1) identify the nature of activities offered and promoted by the groups exhibiting at the event, including how many featured or were related to drinking; and (2) quantify and characterise any other alcohol-related content.

3.2 Methods

3.2.1 Data collection

In September 2015, the week-long freshers' fair was attended by the author (A.F.). The fair comprised four individual events across the university's campuses: a larger five-day event at the main campus and three small afternoon events on one day only at external campuses. The SU provided a timetable listing when and where exhibitors would be. Since the three smaller events took place on the same day, a decision was made to attend the largest of these in order to include the majority of exhibitors in the study. Each exhibitor was visited once and all marketing materials being handed out were collected. This excluded general

information leaflets that were not directly advertising the society or society events. For example, where a religious society stall had an information leaflet about that particular religion produced by an external organisation, this was not collected. Brief notes were also taken to record the type of information each exhibitor displayed at their stand (for example; photographs or images, society merchandise), but these were not included in any analysis; a descriptive account is provided in the results for context.

3.2.2 Data analysis

The sports clubs and societies were grouped according to the eight categories as listed on the SU website; any club that was not listed was assigned to the most appropriate category. An additional category was created for businesses, resulting in nine in total:

- Course-based and careers (CC);
- Equality, diversity and student networks (EDS);
- Faith, thought and belief (FTB);
- Hobbies, interests and lifestyles (HIL);
- International and cultural (IC);
- Music and dance (MD);
- Volunteering, campaigning and current affairs (VCC);
- Sports;
- Local businesses.

A summative qualitative content analysis (167) was used to identify the frequency and describe the nature of activities offered and alcohol-related content present in the marketing materials. Undertaking qualitative content analysis offers researchers a flexible, pragmatic

method for analysing text data. Research employing a qualitative content analysis design largely follows the naturalistic paradigm (as opposed to positivist). It was chosen for this study as it goes beyond counting to subjectively interpret the content through a systematic classification process of coding text into themes or patterns. This allowed the author to explore the nature of the content as well as how often it occurred. An overview of the different approaches to qualitative content analysis are outlined by Hsieh and Shannon (167), which differ in terms of their goals and therefore the type of data they use and how the data is coded. A summative content analysis approach was adopted in this study as it typically used in the analysis of written text data, such as manuscripts or textbook content, rather than that from qualitative interviews (as is used within conventional or direct qualitative content analysis). It is a flexible approach, which can accommodate the inclusion of images as well as text, seeking to understand particular content in a particular context. Rather than analysing the data as a whole, summative content analysis focuses upon single words or relates to particular content (in the case of this study, text and imagery relating to events and alcohol), which are identified prior to and during data analysis. It not only seeks to count the occurrence of such content, but also understand the contextual use of words or imagery, justifying its use in meeting the aims and objectives of this study.

Prior to analysis, each exhibitor was assigned a unique code indicating which category they belonged to. For example, CC9 is a society within the course-based and careers category. All materials were read several times (by A.F.) to identify and record, in NVivo 11, any written references or images related to activities, events and alcohol. Each occurrence of an activity, event or alcohol-related content was studied to explore the nature of the text or image and preliminary codes were applied inductively to them. These codes were revised following greater familiarity with the data and grouped according to similarity. Each group of codes

were then defined as distinct themes. A sample of 24 exhibitors (11%) were independently validated by supervisor M.B. In these, there were 428 occurrences and the level of agreement between researchers was 85% (n = 364). Disagreements in coding were discussed, which led to final refinement of the themes that were then applied to all data. The frequency with which each code featured, by exhibitor, was recorded in Microsoft Excel. Any repetitions (e.g. the logo of a branded alcoholic drink appearing twice on one handout) were counted as one occurrence. Results are displayed according to the nine exhibitor categories as listed above.

3.2.3 Ethical approval and considerations

This study was approved by the University of Nottingham Medical School Research Ethics Committee (reference number D18062015 SoM EPH PhD) and permission to collect all marketing materials for research purposes was granted by the University's SU. It was not considered necessary to obtain individual consent from each exhibitor as the fair was free to attend and handouts were being freely distributed to all attendees. However, a statement about the research was included in the logistical information provided to all exhibitors by the SU prior to the fair. The exhibitors were informed that research was being carried out to understand the way in which clubs, societies and events are promoted to students, but that individual exhibitors would not be identified in any research outputs. All data containing identifiable information on the exhibitors that was entered into Word and Nvivo were stored on a password-protected computer; all data presented below have been anonymised (images have identifiable information blacked out).

3.3 Results

Of the 348 exhibitors present at the event, 217 (62%) provided at least one handout including printed leaflets, booklets, and merchandise. Table 3.1 shows the number of exhibitors that were present and attended at the freshers' fair.

Table 3.1 Exhibitors at the freshers' fair

	Societies	**Sports**	**Businesses**	***Total***
Total number of exhibitors listed[a]	253	80	49	**382**
Number of stalls present and attended	229	79	40	**348**
Number of stalls not present	24	1	9	**34**

[a]according to the timetable provided by the SU

3.3.1 Display information

The amount and type of information on display at each exhibitor's stand was varied. Student-led societies' displays included banners, cultural images or objects e.g. flags, information about the club's activities and how to join, club-branded clothing, posters advertising future events, and photographs. The photographs on display depicted the society's interest (e.g. a drama society performing or a sports club playing a match) and/or social events such as having dinner together, on a night out or attending a formal event. Some societies which provided marketing materials to hand out also displayed larger versions of these. Local and national businesses displayed their logos, posters describing their services or upcoming events, and exclusive offers and prizes for students. Local bars, pubs and clubs promoted offers such as the opportunity to win a bar tab, as well as their club nights and drinks promotions alongside alcohol imagery e.g. images of different alcoholic drinks including branded alcoholic drinks.

3.3.2 Marketing materials

From the marketing materials, the analysis identified three themes: 1) society-interest activities and socialising events; 2) alcohol-related drink and event promotions; and 3) alcohol brands and advertising of venues. The first theme comprised 'society interest sessions', which were activities and events run by student-led societies that related to their interest (ranging from sports training, music rehearsals, volunteering, cultural trips and religious worship) and socialising events outside of the society's special interest (including pub, cinema or restaurant trips, and nightclubbing).

There were a total of 1199 distinct occurrences in text and imagery; content related to *society-interest activities and socialising events* occurred throughout the categories, whereas content related to *alcohol-related drink and event promotions* and *alcohol brands and advertising of venues* was more concentrated among marketing materials from local businesses. Table 3.2 shows the occurrence of these themes and their corresponding sub-themes within the marketing materials, broken down by the exhibitor categories. The themes and corresponding sub-themes are then discussed in detail, supported by quotes and images from the marketing materials to illustrate the findings.

Table 3.2 Frequency of themes within the freshers' fair marketing materials, by exhibitor category

	Society-interest activities and socialising events							***Alcohol-related drink and event promotions***			***Alcohol brands and advertising of drinking venues***	
	Society-interest sessions		*Social activities in a bar*		*Social activities not in a bar*			*Drink offers*	*Event offers*	*Alcohol incentive*	*Branded drink*	*Venues*
	Alcohol reference	*No alcohol reference*	*Alcohol reference*	*No alcohol reference*	*Alcohol based*	*Alcohol free*	*No alcohol reference*					
Course-based and career (n=50)	-	33	6	13	5	1	38	1	-	-	-	1
Equality, diversity and student networks (n=15)	-	-	-	3	-	1	26	-	-	-	-	-
Faith, thought and belief (n=12)	-	20	-	-	-	-	6	-	-	-	-	-
Hobbies, interests and lifestyle (n=56)	16	100	-	10	-	1	21	4	2	-	2	-
International and cultural (n=38)	-	6	-	2	1	-	29	-	-	-	-	-
Music and dance (n=25)	2	25	4	176	-	-	9	1	3	-	2	7
Volunteering, campaigning and current affairs (n=32)	3	29	1	3	-	-	19	-	-	-	1	-
Sports (n=79)	33	252	2	24	4	1	42	-	-	-	-	-
Local businesses (n=40)	-	-	11	70	-	-	1	79	9	8	22	8
Total[a]	**54**	**465**	**24**	**301**	**10**	**4**	**191**	**85**	**14**	**8**	**27**	**16**

[a]Total number of occurrences are higher than number of stalls as many exhibitors provided more than one marketing material or promoted several events/branded drinks

3.3.2.1 Society-interest activities and socialising events

Most student-led societies and local businesses promoted at least one activity or event within the marketing materials.

Society-interest sessions

There were 519 (49.5%) references to student-led societies' interest sessions across the handouts, spanning sports and music practice sessions, charitable work, religious or cultural worship and celebrations, and course-based talks or networking. Among these, 54 (10.4%) had a reference to drinking. The majority of activities which referenced drinking were from sports (33, 62%) and HIL (16, 29.6%) societies. Activities were typically a taster session for new students or a regular society session followed by going to a bar, pub or nightclub (Figure 3.1a), *"After every film, we head off to the [SU bar] for post-show drinks and discussion. What better way to end the week than that?"* (HIL society 8). Societies described these events as a good way to spend your time (as illustrated in the previous example), an opportunity to get to know the society, *"the perfect way to find out for yourself what [society] is all about"* (MD society 2) or celebrate "*we will be going to [SU on-campus bar] for inevitable celebration"* (MD society 7).

There were two societies whose interest was based around the craft of brewing or creating alcoholic drinks, who hosted regular events making and/or drinking them. One did offer non-alcohol alternatives at their weekly '*Mixology*' sessions, "*Mixologies - TWO COCKTAILS £6 (members), £7.50 (non-members), £3 (mocktails)"* (HIL society 13).

Figure 3.1 Society-interest activities and socialising events

a) Society-based interest activity, drinking reference (Sports society 59);

b) Social activity, taking place in a bar, pub or nightclub (Sports society 22);

c) Social activity, taking place in a bar, pub or nightclub (Business 8);

d) Social activities, not in a bar, pub or nightclub (CC society 36)

a)



b)



c)



d)



Social activities

There were 530 (50.5%) references to social events that were not regular society-interest activities, organised by student-led societies and local businesses.

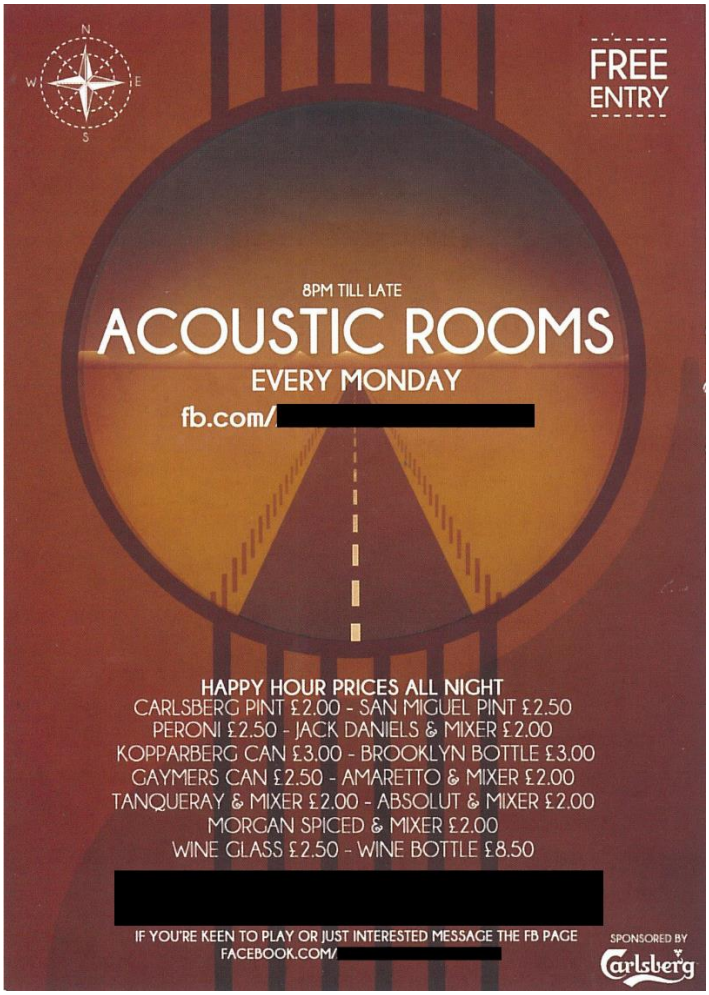
- ***Taking place in a bar, pub or nightclub***

325 (61.5%) of these social events took place in a pub, bar or nightclub. These were promoted across all categories except FTB societies. Events run by student-led societies included bar crawls (12, 3.7%), pub quizzes (10, 3.1%), pub trips (36, 11.1%) and going to nightclubs (12, 3.7%). These included societies' "*first social"* of the year (sports society 22) and their regular events that were taking place across the year, "*Come join us at our weekly social at [pub] on Tuesdays at 8pm!"* (MD society 18). Several referred to the weekly club night aimed at sports clubs, '*Wednesday night is sports night at [nightclub]!"* (sports society 54). Many of the societies aimed their events at first year students, "*Fresher's Bar Crawl*" (CC society 25*),* presenting them as an opportunity to get to know other members (Figure 3.1b); "*the perfect way to make friends*" (CC society 41). Others framed their events as being well-renowned, *"7 legged. Europe's biggest bar crawl, 14 bars, 3 clubs, 7000 students #thelegendcontinues"* (VCC society 22) or popular, *"Massive welcome socials at our stomping ground, [bar]*" (sports society 57). One society also wrote that they host "*some of the best socials on campus*" achieved through "*longstanding relationships with promotors, bars and clubs*" (CC society 25). Another also described access to a snooker bars' facilities came with the purchase of a drink "*Usage of the tables are free after the purchase of one drink from [venue]*" (sports society 56), indicating that some student-led societies have established relationships with local drinking venues.

Events offered by businesses (namely bars and nightclubs) were weekly clubbing (35, 11.0%) and live music events (229, 70.5%) but also included karaoke and pub quiz events. These were promoted by both local businesses and student-led societies. Compared to student-led societies, they typically provided more event details, describing them as popular "*THE biggest night of the weekly social calendar*" (Business 8), "*The place to be on a Saturday night!*" (Business 4), and having the best music and entertainment, "*[Event name] is the place where you can hear new, fresh alternative music as well as classic indie hits*"(MD society 24), "*All the best pop from all the eras*" (Business 4). Most events organised by local bars and nightclubs took place weekly and framed themselves as being exclusive to students at the University (Figure 3.1c); "*[City] UNIVERSITY'S OFFICIAL WEDNESDAY NIGHT, [Name of event] EVERY WEDNESDAY*" (Business 11).

Of the events taking place in a bar, pub or nightclub, 25 (7.7%) explicitly referenced drinking or alcohol, found across MD, VCC, CC and sports societies and local businesses. Such references included images of students with alcohol that accompanied the description of the event, text which encouraged students to "*come have a drink*" (CC society 37), or alcohol branding. One sports club made it clear in the name of their fancy-dress event, "*Get Shipwrecked*" (sports society 31), that the purpose of the event was to get drunk. All events promoted by local businesses that referenced drinking included promotions for and advertising of alcoholic drinks available at the event (Figure 3.2).

Figure 3.2 Social activity, taking place in a bar, pub or nightclub



(Business 4)

- ***Not in a bar, pub or nightclub***

There were 205 additional events not taking place in a bar, pub or nightclub which were categorised into three groups: those referencing drinking or alcohol (10, 1.9%), those which were explicitly alcohol-free (4, 0.8%), and those which did not make it clear that they did or did not involve drinking (191, 36.0%).

Events explicitly referencing drinking were found in the CC, IC and sports societies. This included food and alcohol evenings, "*Cocktails and Canapés*" (sports society 50), and formal events such as a "*River cruise party*" (CC society 7) and "*Science ball*" (CC society 6) that were

accompanied by alcohol imagery or images of students with alcohol. Some societies also advertised weekend trips abroad run by external companies, which included bar crawls, reduced entry to nightclubs and pub trips (n=7, 1.3%). In one handout, the description of one such event was supported by an image of smiling students running down a street with a bottle of champagne (Figure 3.1d).

Four societies (from HIL, CC, EDS and sports society categories) each promoted one event that was explicitly alcohol-free (4, 0.8%). This included a "*tea social*" (sports society 50) and a mini-golf activity which was described as the society's "s*ober social*" (CC society 24).

The events which did not make it clear that they did or did not involve drinking spanned a broad range of activities. Many sports clubs and societies stated they held "*regular"* and a "*variety of*" 'socials' but provided no further details on specific events. The nature of many of these events were similar to some of the alcohol-based events as described above, with the same name or activity, but had not disclosed the location. This included sports societies promoting the weekly Wednesday club night, "*Come and play women's football with [society]! As well as weekly matches on Wednesday afternoons there will be regular sports socials with the other [society] sports teams*" (CC society 6), annual formal events, river cruises, weekend trips, and themed events, "*Come along to our social on 7th October! Get your tights out, it's 80s disco theme!*" (Sports society 68). One event described as "*an ancient themed house party (replacing the toga crawl)*" (CC society 11) indicated it could be alcohol-based as it appeared to be replacing a bar crawl.

Other common events in this category included activities that are typically not associated with drinking alcohol but were not described as alcohol-free socials. Events included film

nights, cinema or restaurant trips, bowling and laser quest as well as cultural events such as Chinese New Year and Bonfire Night.

Although some student-led societies only promoted events which referenced alcohol or drinking, the majority had a range of events spanning those with and without references to alcohol or drinking, *"Brilliant Socials: Pub Quiz, Sports Day, Themed Nights, Zoo trip, Cinema trip"* (CC society 6). Many of the societies which did not promote a specific event encouraged students to refer to their social media page to find out about social events taking place across the year.

3.3.2.2 Alcohol-related drink and event promotions

Drink promotions

There were 85 drink promotions within the handouts, 80 (94%) of which were for alcoholic drinks and 5 (6%) for non-alcoholic drinks. Most promotions featured on handouts from local businesses, however, three student-led societies (MD and HIL categories) also handed out leaflets that included promotions for local bars, pubs and nightclubs; two alcohol-interest societies also offered promotions to their members.

Promotions included regular offers on alcoholic drinks at bars, pubs and nightclubs e.g. happy hour (although some venues extended these offers throughout an evening) (Figure 3.2), and vouchers for specific drinks at these venues (Figure 3.3a). Many alcoholic drink promotions targeted students, "*Student drinks prices ALL NIGHT on EVERYTHING"* (Business 8), or were a part of nightclub events geared towards students (Figure 3.3b). One student-led society advertised that their members receive vouchers for free beer, *"Receive £20 worth of*

[chain pub] real ale vouchers, a real bargain!" (HIL society 34). The non-alcoholic drink promotions included having two "*mocktails"* for a set price at a weekly cocktail making class, and vouchers for hot and cold soft drinks in a national chain of pubs.

Alcohol-related event promotions

There were 14 distinct references to reduced-price entry to events, which were either alcohol-based (2, 14.3%) or took place at a bar, pub or nightclub (12, 85.7%). These included advertisements for free entry to a specific club night before a particular time and reduced price or free entry to a specific club night upon presentation of the handout or a voucher (Figure 3.3c). These often featured alongside alcoholic drink promotions "*FREE before 11pm - £2.50 cocktails all night!*" (Business 4). Events at nightclubs were all described as either having great music, "*All the best pop from all the best eras"* (Business 4) or the place to have a good night out, *"the most fun Friday night in town"* (MD society 23). The two student-led societies based on the craft of alcohol also offered promotions on alcohol-related events to their members: one for a reduced price cocktail making class, and the other, "*free or reduced entry to over 160 beer festivals*" (HIL society 34).

Alcohol-related incentives

There were eight occurrences where alcohol-related incentives were offered in exchange for engaging with an event, social media page or e-newsletter. This included receiving "*drinks offers*" (Business 4) by joining a nightclub's Facebook page or signing up to their e-newsletter, winning a £1,000 bar tab when visiting a bar (Business 12) and having a "*pizza & beer night*" for taking part in a weekly football tournament (Business 17). One student-led society's incentive to attend their bar crawl event was to "*keep this leaflet and hand in with your 7 legged form to be entered into a prize draw for an iPad.*" (VCC society 22)

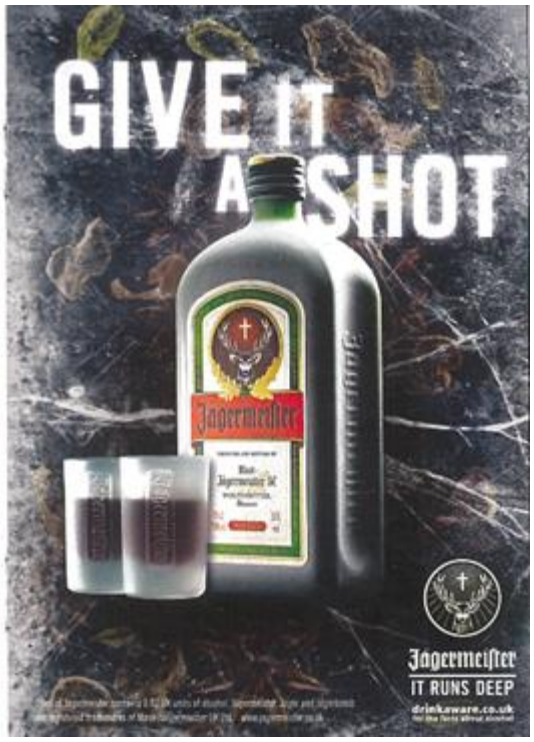
Figure 3.3 Alcohol-related drink and event promotions

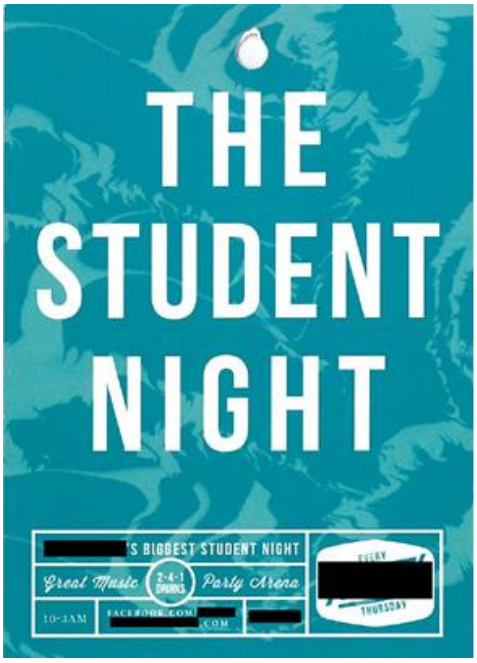
a) Drink promotions (Business 13);

b) Drink promotions (Business 4);

c) Alcohol-related event promotion (MD society 24)

a) 



b) 

c) 

3.3.2.3 Alcohol brands and advertising of venues

An advertisement is defined as a "notice or announcement in a public medium promoting a product, service, or event" (168). We found 27 distinct instances of advertising of branded alcoholic drinks and 16 distinct references to advertising of bars, pubs and nightclubs within the handouts, although several were repeated multiple times on some of the handouts. Again, the majority appeared on handouts from local businesses (30, 70.0%), with a few on handouts from MD, VCC, CC, and HIL societies who provided leaflets from local businesses.

Alcohol brands

Advertising of branded alcoholic drinks included the logos of Jägermeister, Carlsberg and Jack Daniels brands, among others, on leaflets as a sponsor of nightclubs or particular club nights or were featured on merchandise such as tote bags. Alcohol brand advertisements were also found in marketing materials from local businesses. Some of the adverts encouraged the consumption of that drink at a particular venue or stated that the drink was available at a venue (Figure 3.4a). Many included motivational or persuasive slogans, "*GIVE IT A SHOT*", "*THIS IS OUR MOMENT, THIS IS OUR SHOT*" (both from Business 13) and featured alongside a reduced-price voucher for that particular drink.

Advertising of venues

Advertising of bars, pubs and nightclubs across the handouts represented eight unique venues. These included logos of the venues on leaflets and merchandise, as well as more detailed descriptions of venues. Venues described themselves as well-renowned in the city, hosting "*the biggest club nights in town*" (Business 4) for students (Figure 3.1c), or providing club nights *"every night of the week, with a range of musical styles, drinks and antics to suit*

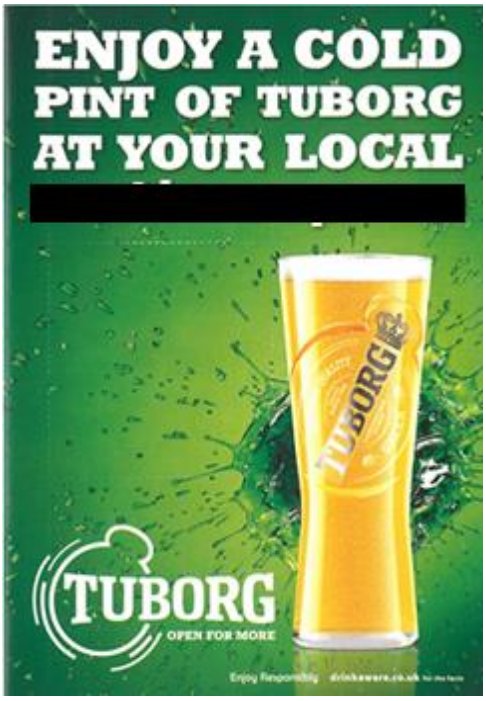
everyone" (Business 11). Many also highlighted the drinks they served, offering an "*ever-changing drinks selection*" which has "*set standards in this city*" (MD society 24) or a *chance to chill out during happy hour with a post-uni pint*" (Business 11).

A few of these occurrences were accompanied by alcohol brand logos (as stated in the previous sub-theme) and general alcohol imagery. For example, the logo for one bar included an animated picture of a person serving shots (Figure 3.4b). It also handed out A3 posters promoting its drinks menu, with recipes and images of the cocktails on offer.

Figure 3.4 Alcohol brands and advertising of venues

a) Alcohol brand advertisement (Business 13)

b) Advertising of venues (Business 12)

a) 

b) 

3.4 Discussion

Within the marketing materials at the freshers' fair, the majority of student-led societies promoted activities relating to their interest, of which a small proportion were specifically concerned with drinking or alcohol. Many also promoted social events not related to their interest, most of which took place in a drinking venue or referred to drinking through the event description and/or accompanying imagery. Out of those not taking place in a drinking venue, only four were explicitly promoted as alcohol-free. Club nights and live music events were commonly reported by local drinking venues, many of which featured promotional offers on entry to the events and alcoholic drinks, and alcohol branding. A few of the student-led societies also promoted these events and offers. Advertising for alcohol brands was also present on handouts from some local businesses; although these were not present as frequently as social events, branded logos and promotional offers on drinks and nightclub entry were typically repeated several times on a single handout.

Events that involved or were related to drinking were not present across all categories of student-led societies, however, those that did promote a social event typically promoted at least one that referred to drinking or took place in a drinking venue. Many groups also promoted the latter as the first social meet of the year, whilst some promoted several events that were scheduled across the first term or the year. Many also encouraged students to join their social media group to find out about the events taking place throughout the year. The dissertation by Loza (169) explored the nature and occurrence of alcohol-related content presented in Facebook groups of student-led societies within the same university during the 2015/16 academic year (the same year during which the freshers' fair in this study took place). Across a sample of 51 societies, a total of 336 drinking-related events were promoted across the academic year. These findings highlight that drinking-related social events are

commonplace within student-led societies and advertised actively on student-facing social media, which act to endorse the pro-social norms surrounding drinking at university (120). In addition, the presence of local bars, pubs and nightclubs at the freshers' fair promoting and advertising alcohol and club nights that were taking place regularly throughout the year suggests that the university is a part of creating an environment that upholds the notion that drinking is considered a normal behaviour.

Of particular concern is that this occurs within the first week that students have arrived at university and at the student-led societies' first point of contact with students. Peers attitudes and behaviours are suggested to have an important influence on young people's alcohol use (119); peer pressure, pro-alcohol peer norms and socialising with peers who drink, and membership to societies associated with heavy drinking, have been associated with alcohol misuse and binge drinking among university students (110, 120). Further, modelling of alcohol-use by older students can lead to new students viewing alcohol as a positive and socially acceptable experience (120). Studies have noted that increased alcohol use at university is a result of the "*socially permissive norms around drinking*" (170) in the university environment, which provides opportunities for heavy drinking (83). Qualitative research suggests that many young adults perceive heavy drinking as the norm (132) and an integral part of the young adult experience (131), finding it difficult to imagine alternative social activities.

Although many of the events taking place at a drinking venue did not refer explicitly to drinking, it has been found that attending such venues is often associated with heavy drinking (136, 137) suggesting that many of the events advertised would have involved this. Furthermore, many student leaders also rank drinking as an important aspect of their social

activities (132). Out of the 530 social events promoted within the freshers' fair materials, only four were explicitly alcohol-free (although it is likely that many more did not involve drinking, it was not possible to confirm this). Many studies measuring student alcohol consumption have focused upon highlighting the high levels of hazardous and harmful drinking, but it has also been noted that a sizeable proportion of university students do not drink alcohol. In a recent cross-sectional survey of 724 students at another university in the UK (136), nearly one-fifth of respondents reported they abstained from alcohol. The findings of this study suggest that the large proportion of social events promoted by student-led clubs and local businesses are alcohol-based and may therefore be unsuitable for students who abstain from alcohol or who do not wish to drink heavily. It is also possible that although some student-led societies promoted activities not related to drinking, their promotion of drinking-related events make them feel out of reach for students who abstain wholly from drinking although there is currently no evidence to support this suggestion. The views of non-drinkers in relation to this are explored further in **Chapter 5**. Further, the prevalence of drinking alcohol among adolescents and young adults declining in recent years (23, 75, 104) suggests that there could be an even higher proportion of non-drinkers at universities in the coming years and highlights the potential need for universities to be providing appropriate social events for these students.

Many drinking venues provided or advertised reduced-priced alcoholic drink offers within their marketing materials; many also had advertisements for specific alcohol brands. Findings from a recent review looking at exposure to alcohol marketing and subsequent alcohol consumption found that as little as a one-off exposure to alcohol advertising (in magazines, television and on social media) increased immediate alcohol consumption relative to viewing non-alcohol advertisements among undergraduate students (171). Current evidence to support the restriction of advertising in order to reduce alcohol consumption among adults

and adolescents is inconsistent (172), however, the presence of alcoholic drink offers in the marketing materials could have acted as an incentive to higher alcohol consumption. A recent qualitative study undertaken with young adults found the price of alcohol to be an important factor in the amount they consumed on a night out, with self-imposed budgets to moderate their alcohol intake often being undermined by alcoholic drink offers (131).

The presence of drinking venues at the freshers' fair suggests that there are established relationships between them and the SU (who organise the freshers' fair), raising questions about the nature of the relationship between these businesses and universities. In addition, there were also instances of student-led clubs handing out promotional material from these venues or stating they had established relationships with local bars and nightclubs. Some student-led clubs also advertised that they regularly attended these venues, suggesting such relationships may not be limited to one or two clubs. This may act as an endorsement of drinking to students by the university and warrants further exploration of how such relationships form. The University should also consider whether such relationships should be limited and incorporated within their current alcohol policy, especially considering that having links with organisations that sell or endorse drinking is associated with more problematic drinking among student-led groups (95).

3.4.1 Strengths and limitations

This is the first study to explore alcohol-related content in materials provided at a unique marketing event at a university in the UK. The use of qualitative summative content analysis allowed the author to not only explore the extent to which alcohol-related content and activities occurred across the different types of exhibitor present at the freshers' fair, but also explore the nature of such content, which provided a richer understanding of how

drinking is portrayed and promoted to students at their first face-to-face contact with student-led groups. It was undertaken at a single university in the UK and so the findings are not necessarily transferable to other universities, however, the data collected covered all stalls present at the freshers' fair representing the range of student-led societies and increasing the generalisability of the findings. It is possible that the few exhibitors who were scheduled but not present at the fair may have promoted drinking in a different manner, although this comprised a small percentage of student-led groups (n=34/382).

Investigator triangulation was undertaken in a step to enhance the validity of the findings and minimise researcher subjectivity in the coding (173). This involved using two different investigators in the analysis process, wherein the author and supervisor M.B. both examined the same sample of marketing materials, coded and counted the number of occurrences present, which were then compared. There was a good level of agreement between the researchers, heightening confidence in the findings, although it is possible that those receiving the marketing materials (i.e. first year students) would have interpreted the content differently. For example, they may have considered particular events to involve drinking to different extents, which may affect how they are classified. "In member checking", whereby the researcher asks for participants' views of their initial findings and interpretations is considered to be the most critical technique for establishing credibility (174) and they should be asked to suggest alternative language, give critical observations and for their own interpretations (175). In this case would be pertinent for further studies on freshers' fair and/or student-led society events to take data, and the researchers' preliminary analyses and interpretations back to those whom the marketing materials were aimed at, first year students, for them to judge the accuracy and credibility of the researchers' account (3). This could result in alternative descriptions of drinking-related events and would serve to enhance the credibility of the findings.

Only the handouts provided at the freshers' fair were included in the analysis, omitting the visual stands that included further information and imagery relating to societies and businesses. It had been planned to collect this information by writing down the content at the point of visiting the fair, however, the majority of exhibitors displayed an immense amount of content and detail in a crowded and hectic environment, and so it was not practicable to collect all the information within the time allocated for the fair. As ethical approval did not include taking photographs of the visual stands, it was decided to not include this information in the study. Such content, as well as any interactions with the exhibitors themselves, may have impacted upon students' impressions on the extent to which the society involves drinking within their activities and events. For instance, the researcher observed that exhibitors from a local bar were encouraging students to attend their stand by announcing alcoholic drink price promotions and giveaways. Considering the difficulties of collecting data in such an environment, it may therefore have been more practical to use several researchers and allocated them to different areas of the fair (such as to the separate campuses or particular sections of the fair within each campus) where there would have been more time to capture the visual and oral information at each stand. Of course this comes with increased research costs, but as a typical freshers' fair is one day (rather than over the whole of freshers' week) this could be a practicable solution if conducted at a different university. Taking photographs of each stand would be also be a viable option but may require additional consent from exhibitors and given the number of exhibitors at the fair, would also require factoring in considerable time to transcribe content ready for analysis.

This study only considered one place where students may receive information about student-led societies and local businesses, their events and ways in which they promote drinking. The findings suggest that there are many other locations where students receive this information, such as on student-led society websites, e-newsletters and social media. Focusing upon the freshers' fair may also have missed local businesses who did not attend the freshers' fair but advertise to students in other locations throughout the academic year, such as leaflets in halls of residences, which has been noted previously (1). In order to gain a fuller understanding of the type of events and how alcohol-related content is advertised towards students in this unique environment, further work could be carried out to determine the different locations of advertising and explore the nature and occurrence of these.

3.5 Conclusions

The findings of this study provide evidence that in the first week of university, students are exposed to alcohol-related events, promotions and advertising in freshers' fair materials from student-led societies and local businesses. This may act as an incentive for new university students to participate in drinking and serve to normalise drinking at university, particularly as drinking appears to play a prominent role in initial social gatherings and the formation of new friendships. This could have implications for their drinking behaviour at university and throughout their life-course. The next chapters go on to consider first year undergraduate students' drinking behaviour prior to and upon arrival to university, and across the first year and their perceptions of and experiences with drinking over this time.

4 Drinking patterns of first year undergraduates prior to and across the first academic year

4.1 Introduction

The previous chapter showed that in the first week of university, students are exposed to alcohol-related events, promotions and advertising in freshers' fair materials from student-led societies and local businesses, which may serve to normalise and incentivise drinking for new students to the University. The work presented in this chapter builds on this by quantitatively assessing how much alcohol first year undergraduates drink prior to, and then upon arrival to university, and across the first academic year.

As highlighted in the introduction chapter, despite a decline in the proportion of young adults (aged 16 – 24 years) drinking over the past decade, they are most likely to binge on their heaviest drinking occasion, compared to older adults. Recent studies have also identified that a high proportion of students drink above the low-risk guidelines, engage in binge drinking (although there is little information on how frequently), and, as measured by the AUDIT questionnaire, are classed as hazardous drinkers. There is a dearth of knowledge about pathways into drinking and what these studies do not tell us is when these drinking patterns are established and developed. Given the higher proportion of hazardous drinking observed in university populations compared to their non-university peers, the transition to university is an important potential pathway into the establishment and/or development of drinking behaviours as young people enter adulthood. Exploring drinking patterns prior to and then upon arrival to university will help to understand whether drinking patterns are established prior to arrival, developed prior to, or at, university. This may have implications for prevention efforts to reduce how much students drink, who make up a large proportion

of the young adult population, with potential benefits on immediate and later health and social consequences. The aim of this study was therefore to examine changes in student drinking behaviour during the transition to university and across the first academic year.

4.2 Methods

4.2.1 Survey design and recruitment

In order to meet the aim of exploring drinking behaviour in the transition to university, a means of targeting first year undergraduate students as they entered university and following them up throughout their first year was sought by the author. An existing set of online surveys managed by the University's Students' Union (SU), which are sent routinely throughout the academic year to all undergraduate and postgraduate students, were identified. These surveys, administered online using the Survey Monkey® platform, are primarily used to gather information on students' participant in social clubs, volunteering, and satisfaction with the SU. In order to reduce sampling bias it was important to obtain as complete a sampling frame as possible. These surveys were therefore a practicable and logical option as they would be sent to all first year undergraduate students at the University. A repeat cross-sectional study was designed and implemented with alcohol consumption data collected via the addition of bespoke **drinking behaviour questions** to these surveys.

The first survey (named SUS1, in this study) was sent in the week following A Level results day in August 2016 to all undergraduate and postgraduate students who were beginning their course at the University in September 2016. The subsequent three surveys were sent to

all undergraduate and postgraduate students (across all years of study) at the University in October 2016 (SUS2), December 2016 (SUS3) and April 2017 (SUS4). A link to each survey was included in an SU e-newsletter and they were open for students to complete for 3 – 4 weeks. Entry into a prize draw was offered to students upon completion of each survey (£150 for first place, £50 for second place, £25 for three runner ups); all students that completed a survey were also given a discount code to receive 20% off at the SU's online shop. Incentives of this nature are provided every year and funded by the SU; no further incentive to complete the survey was provided by the researchers.

The SU surveys also included questions to capture demographic information; Table 4.1 illustrates which demographic questions were included in each survey. These questions and answer categories were predetermined by the SU.

4.2.2 Drinking behaviour questions

Drinking behaviour was assessed at each of the four time points in the 2016/17 academic year. At the start of each survey, students were presented with on-screen information about what the survey entailed and an additional written explanation of this study containing a link to a more detailed participant information sheet (see **Appendix 8.3**) that could be accessed online. The written explanation informed students that their answers to the drinking behaviour and demographic questions would be included in this study and that they would remain anonymous to the researchers, but they were free to choose not to answer any question if they wished. Consent was assumed if they answered any of the drinking behaviour questions, which students were informed of.

Table 4.1 Demographic questions and answer categories

	SUS1	SUS2	SUS3	SUS4
Where are you from? UK / The EU / A non-EU country or territory	✓	✓	✓	✓
What is your age? Under 18 / 18-21 / 22-25 / 26-34 / 35-44 / 45-64 / 65+ / I'd rather not say	✓	✓	✓	✓
How would you define your gender? Male / Female / I'll describe in my own words / I'd rather not say	✓	✓	✓	✓
What is your ethnic group? White / Black, African, Caribbean or Black British / Asian or Asian British / Mixed or Multiple ethnic groups / Other or I'll describe in my own words	✓	✓		
Teaching school Option to select from individual academic schools	✓	✓	✓	✓
Study mode Full time / Part time	✓		✓	
Study level* Undergraduate first year / Undergraduate intermediate year / Undergraduate final year / Foundation year / Postgraduate taught / Postgraduate research	✓	✓	✓	✓

*For SUS2, SUS3 and SUS4. The first survey included the following categories: undergraduate, postgraduate taught and postgraduate research.

As the aim of this study was to examine the changes in drinking behaviour in first year students during the transition to university and across the university year, questions which could capture students' quantity and frequency of drinking at multiple time points but did not take up too much space on the survey were required. Several options to do so were considered. The Office for National Statistics currently runs a population-level survey in the UK, reporting the percentage of respondents who drank in the past week and percentage of respondents who binged on their heaviest drinking day in the past week (13). This, however, lacks information on frequency of drinking, including binge drinking, as well as how much

respondents consume over a given period. The AUDIT, CAGE and FAST questionnaires are validated screening tools (89) that have been used previously with students, though these aim to assess an individual's risk of alcohol-related harm rather than give detailed information on drinking behaviour. The Alcohol Toolkit Study concluded that the use of tools that assess alcohol-related harm, like the AUDIT tool, are better for detecting harmful levels of drinking rather than quantitatively assessing temporal patterns of consumption. These were therefore not deemed suitable for use in assessing changes in drinking behaviour across a short period of time (71).

The questions selected for use in the SU surveys were adapted from the European Union Commission (SMART) Guidelines for population surveys (176). These were produced following a systematic review of the evidence and tested among multiple European countries, including the UK, with the aim to create a standardised approach to capture information on drinking behaviour across countries in the EU. The questions recommended by these guidelines enable the capture of multiple measures of drinking behaviour, including; 1) total volume of alcohol consumed, 2) risky single occasion drinking (binge drinking), and 3) context of drinking. They also recommend asking questions to screen for alcohol abuse/dependency, individual harm and harm from others and social support for alcohol policies. The guidelines highlight that the wording of the questions makes it suitable for them to be completed without an interviewer present and are suitable to be adapted to different periods of time e.g. past week, month or year.

The questions included in the SU surveys are shown in Figure 4.1. Due to restrictions on space allocated by the SU for these questions, the following topics were covered: total volume of alcohol consumption, risky single occasion drinking and drinking context, with an

initial question asking if students had ever drunk alcohol to capture students' drinking status at each time point. This allowed us to capture the proportion of current drinkers, current abstainers and lifetime abstainers at each time point.

Figure 4.1 Drinking behaviour questions

1. Have you ever drunk alcohol? [Yes / No]

2. How often did you drink the following alcoholic beverages, even in small amounts, in the past month?

	How often in the last month did you drink?	**What size is your average drink on a day when you drink this beverage?**	**On a day you have this drink, how many do you have on average?**
Beer (including lager, ale, cider)	1) Every day 2) 5 – 6 times a week 3) 3 – 4 times a week 4) 1 – 2 times a week 5) 2 – 3 times a month 6) Once a month 7) I did not drink last month, but I drank in the past year 8) None of the above	1) 1 pint 2) ½ pint 3) Large can (440ml) 4) Small can (330ml) 5) Large bottle (500ml) 6) Small bottle (330ml) 7) N/A	0, 1, 2, 3 to 20
Wine (including sparkling wine)		1) A large glass (250ml) 2) A medium glass (175ml) 3) A small glass (125ml) 4) N/A	
Spirits (e.g. vodka, gin)		1) Single measure (25ml) 2) Double measure (50ml) 3) N/A	
Alcopops (e.g. VK, WKD)		1) Small bottle (275ml) 2) Large bottle (that you might get in a supermarket) (700ml) 3) N/A	

Figure 4.1 continued.

3. Over the past month, how often did you drink several alcohol beverages on a single drinking session? Where 1 drink equals a half-pint of beer, a small glass of wine or single serving of a spirit.

Drinking 12 drinks or more on one occasion	1) Every day 2) 5 – 6 times a week 3) 3 – 4 times a week 4) 1 – 2 times a week 5) 2 – 3 times a month 6) Once a month 7) I did not drink this quantity in the last month but have in the last year 8) I have never drunk this quantity on one occasion
Drinking 6-11 drinks on one occasion	

4. The following questions are about when, where and with whom you drank alcohol with in the past month.

	At what time do you usually drink?	**Where do you usually drink?**	**With whom do you usually drink?**
Beer	1) With a meal 2) At some other time 3) N/A I don't drink this	1) At home 2) At a friend's house 3) In a restaurant 4) In a pub, bar or nightclub 5) Outdoors 6) At home or friend's house followed by a pub, bar or nightclub 7) Other 8) N/A I don't drink this	1) Friends 2) Family 3) Strangers 4) Alone 5) N/A I don't drink this
Wine			
Spirits			
Alcopops			

Total volume of alcohol consumption was captured using the beverage specific quantity-frequency (BSQF) method. This consists of asking about frequency of drinking different types of alcohol in a defined period, followed by the usual quantity and size of each drink consumed on a typical day. In addition to the three basic categories of beer, wine and spirits, alcopops were also included as previous research on drinking behaviour in UK adults found that these are consumed regularly, particularly among those who report binge drinking (177). The size options provided in this study were also adapted to reflect a wide variety of formats available for each drink type in the UK.

Total volume of alcohol consumed by itself does not adequately reflect drinking pattern (176). Drinking in quantities that leads to intoxication is considered a risky behaviour, associated with its own adverse health and social outcomes. Capturing frequency of risky, single occasion (binge) drinking is therefore considered to be an important measure of drinking. Students were asked this question in two parts as per the guidelines (176), firstly the number of occasions they consumed 12 or more drinks on a single occasion and then the number of occasions they consumed between 6 – 11 drinks on a single occasion. Splitting binge drinking occasions according to the amount of drinks consumed allowed for the exploration of the more extreme end of risky, single occasion drinking, which has not yet been explored. The cut-offs were selected based upon those used in the SMART guidelines (176). To ensure comprehension, the question was followed with examples of a standard drink (one alcohol unit equivalent).

Exploring when, where and with whom drinking takes place helps to explain volume of alcohol consumption, and identify more risky e.g. drinking alone or without a meal, or protective drinking practices e.g. drinking with a meal in a family context (176). Furthermore,

to the best of the author's knowledge there is no contextual information (when, where and with whom) on the type of drinks students' typically drink. Having such information will help to inform where and how interventions within this population should be directed. Similar to volume of alcohol consumption, drinking context was captured using beverage-specific questions. In addition to the six categories recommended in the SMART guidelines to capture usual drinking place (at home, at a friend's house, in a drinking venue, in a restaurant, outside, and other) a seventh category to include pre-loading was added (at home, followed by a bar, pub or nightclub). The practice of pre-loading (defined as "*drink[ing] alcohol, especially in large quantities, before going out socially*" (178)) is suggested to be common practice among young people (138) although there is a dearth of evidence among UK students. Its association with greater alcohol consumption, intoxication and alcohol-related risks (138) highlights that this is a potentially problematic drinking behaviour and so was deemed to be a relevant drinking context to explore in the surveys.

For each time point, respondents were asked to base their answers to each drinking measure on the past month. This time frame meant that the freshers' week period was covered at the second time point (SUS2), which is suggested to be associated with higher rates of drinking (113) and drinking to excess (179). It was also used to avoid over- or underestimating drinking frequency, both of which could occur when using the shorter time frame of 'past week' (72, 180), and capture more irregular episodes of heavy drinking (71).

4.2.3 Data management

4.2.3.1 Survey management

Once each survey was closed, a unique code number was allocated to each respondent by a member of staff at the SU. They then linked students who had completed more than one survey to their unique code number using their name and/or university registration number. This information was collected at the start of the surveys routinely by the SU (names were used in SUS1 because students were pre-registration, university registration numbers were used in SUS2, SUS3 and SUS4) so that they were able to link students across surveys for their own data analysis purposes. The use of the code number ensured respondents remained anonymous to this study and provided the opportunity to link answers across the different time points. Anonymised datasets containing demographic and alcohol consumption data were then sent to the researcher in four separate Microsoft Excel files shortly after each survey had closed.

4.2.3.2 Demographic measures

All students that were not registered as first year undergraduate students were excluded from this study. In order to assess how representative the study population was at each time point, demographic characteristics of first year undergraduates at the University in the 2016/17 academic year were obtained from its strategy and planning department. Ethnicity was categorised slightly differently to the SU surveys (White / Black / Asian / Chinese / Arab / Mixed / other / do not want to give information) so these were regrouped to match the categories as listed in Table 4.1. As there were over 60 academic schools listed in both the SU and University data, these were regrouped into to the five Faculties as listed on the University's website. Age at first survey was used to compare age brackets between the SU and University data.

As demographic information was collected at each time point, discrepancies in answers given for age, ethnicity, fee status, gender, faculty, and study level emerged within some respondents who answered more than one survey. No discrepancies were observed for the study mode variable. Where a respondent provided different answers to the same question across two or more surveys (totalling 90 observations across the six variables), their answer to that question was treated as missing. Where a respondent provided different answers to the same question across three or more surveys, and two or more were the same (36 observations across the six variables), the majority answer was taken. Where respondents provided a response in one survey but not another (41 observations) the answer provided was taken. For the age variable, some respondents moved up an age category in between surveys so their age at the first survey answered was taken (61 observations). For study level, 'foundation level' was not an answer option in SUS1 so if respondents chose 'first year undergraduate' at SUS1 and 'foundation level' thereafter, the latter response was taken (15 observations). Details of these discrepancies by variable can be found in **Appendix 8.4**.

Across the four surveys, there were forty-seven occurrences of a whole survey receiving more than one entry from the same unique code number (none in SUS1, 13 in SUS2, 29 in SUS3 and 5 in SUS4). It was confirmed with the SU that it was possible to answer the online survey more than once, so all duplicate entries were assumed to be from the same respondent i.e. two entries from the same unique code number was one respondent. As the results came in date and time order of when respondents answered the survey, it was possible to identify the first response of each duplication and include only the first response in the final dataset.

4.2.3.3 Drinking behaviour measures

Drinking status was calculated using the following questions 'have you ever drunk alcohol?' and 'how frequently did you drink [beer/wine/spirits/alcopops] in the past month?' Students were coded as:

- "Current drinkers" if they responded 'yes' or 'no' to ever drunk AND reported drinking in the past month (it was presumed that answering 'no' to ever drunk was answered erroneously if they then reported drinking in the past month),
- "Current abstainers" if they responded 'yes' to ever drunk but did not report drinking in the past month,
- "Lifelong abstainers" if they responded 'no' to ever drunk AND did not report drinking in the past month.

This is illustrated in Figure 4.2.

The type of drink (beer, wine, spirits or alcopops) that a respondent reported drinking most frequently in the past month was used as a proxy for frequency of drinking in the past month (Table 4.2 shows an example). Total units drunk in the past month for each respondent was calculated using the reported usual frequency, size and number of each drink type. Using these measures, the total volume of each drink type consumed (in ml) was calculated and converted to number of units, using a standard % ABV (alcohol by volume) (181). Total units for each drink type were then added together to give total usual units consumed in the past month. An example of how respondents' answers were translated into total units is given in Table 4.2.

Figure 4.2 Flow chart illustrating how students' drinking status was calculated

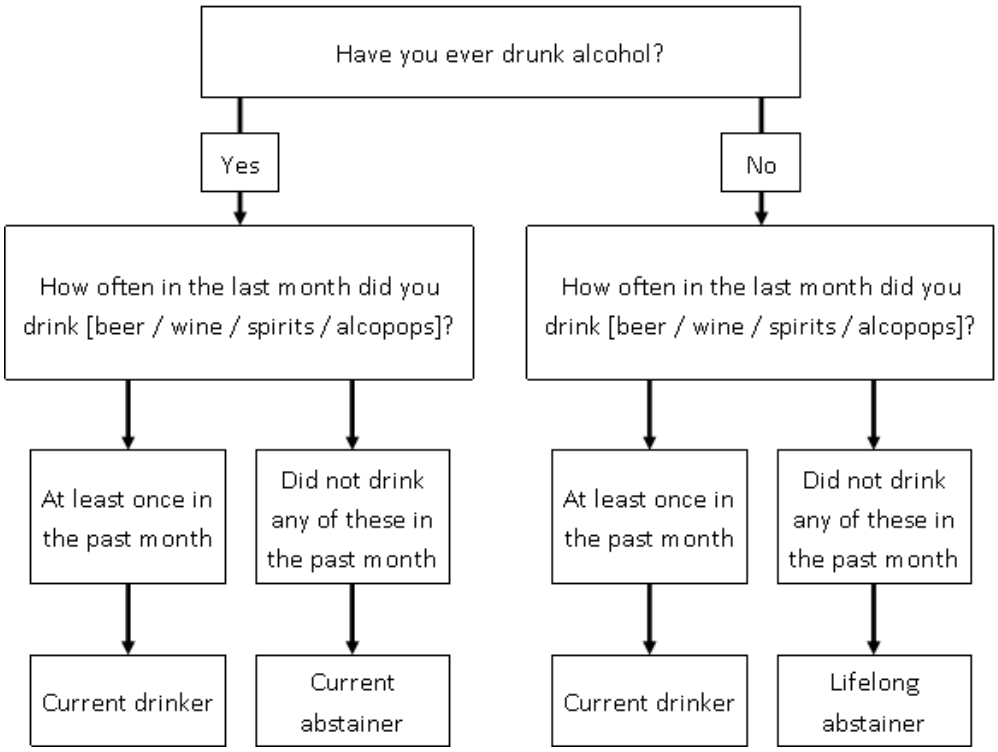


Table 4.2 Worked example calculating total units consumed in past month, and frequency of drinking in past month

	How often in the last month did you drink?		What size is your average drink on a day when you drink this beverage?		On a day you have this drink, how many do you have on average?	Total ml	Total units
	Answer given by student	**Average days in past month**	**Answer given by student**	**Volume (ml)**	**Number of drinks**	**(volume of drink in ml x number of drinks) x average days**	**(total ml of drink x %ABV*) / 1000**
Beer* (including lager, ale, cider)	1-2 times a week	6	1 pint	568	6	20,448	81.8
Wine* (including sparkling wine)	Once a month	1	A medium glass of wine (175ml)	175	1	175	2.3
Spirits* (e.g. vodka, gin)	3-4 times a week	14	Double measure of spirit (50ml)	50	3	2,100	84
Alcopops* (e.g. VK, WKD)	None of the above	0	N/A	0	0	0	0
						Total units in past month	168.1
Frequency of drinking alcohol	3-4 times a week	14					

*Beer = 4%, Wine=13%, Spirits=40%, Alcopops=4%

The EU commission guidelines highlight that risky single occasion drinking may contribute significantly to total volume of alcohol consumed and that, in the general population, respondents may not include extreme quantities in their answer to BSQF questions, particularly when it is not their dominant drinking pattern. It therefore recommends adding total number of units from these occasions to those from the BSQF questions to give an estimate of total units drunk in the past month. However, as previously published research has suggested that a large proportion of students binge when they drink (88), it was decided that total usual units from the BSQF questions would adequately reflect intake that included binge occasions.

4.2.4 Analysis

All data management and analyses were conducted in Stata version 15.0 (Stata Corp, College Station, TX).

4.2.4.1 Cross-sectional analyses

Drinking status, drinking frequency, binge drinking frequency and total units consumed in the past month were analysed to examine changes over time. Drinking status was calculated for all respondents at each time point; the remaining drinking measures were then calculated for those who reported that they were a current drinker. Categorical responses (drinking status, drinking frequency and binge drinking frequency) were compared across the four time points using a chi-squared test. In a valid chi-squared test, observations are classified into mutually exclusive categories. As it was possible for a respondent to answer more than one of the four surveys, the chi-squared tests for drinking status, drinking frequency, and binge drinking frequency were run a second time after selecting a single survey response at random for each of the respondents that answered two or more of the surveys. These findings are presented underneath the original chi-squared test results, where relevant.

Differences between males and females at each time point were also compared using chi-squared tests for these variables.

Total usual units was positively skewed at each time point so the median and interquartile range were calculated. Median units consumed across the four time points were compared using Kruskal-Wallis tests. Differences between males and females at each time point were compared using Wilcoxon rank sum test. Across the four time points, a number of extreme values for total units drunk in the past month were observed. It was considered that these observations far exceeded the amount of alcohol consumption possible for one month. The impact of using different cut-offs deemed to be implausible (over 400 and 500 units per month, and those exceeding the 99th percentile) were explored, but there was no appreciable difference between these on the outcome. Observations that exceeded the 99th percentile at each time point were therefore excluded from analyses. This was considered the most pragmatic option since the test was looking for changes over time and this allowed for increases or decreases in total units consumed.

Drinking context was assessed at SUS2 only as the aim was not to assess changes over time but explore usual drinking context by drink type. This time point was chosen as it had the greatest number of responses out of the three surveys conducted during the academic term (SUS2, SUS3 and SUS4). The proportion of students' usual time of drinking, location of drinking and company when drinking were calculated by drink type. If a student's answer was "I did not drink this" to a drink-type, they were excluded from analyses for that drink only, as were missing responses.

4.2.4.2 Longitudinal analysis

Logistic regression was used to examine the association between ever binge drinking prior to university (SUS1) and binge drinking in the first month of university (SUS2). Students who responded to both SUS1 and SUS2 were included in the analysis. Univariable logistic regression was used to calculate odds ratios and 95% confidence intervals for the associations between student characteristics and binge drinking in the first month of university. Due to the smaller sample size for this analysis, potential confounders were included as binary variables (Age: <21 years and >21 years; Gender: Male and Female; Ethnicity: White and Non-white; Fee status: UK and Non-UK). Variables which were statistically significant, based on a p value of 0.05, were entered into the multivariable model. Likelihood Ratio Tests (LRT) were used to examine the effect of removing variables one at a time in order to determine whether they should be included in the final model. Where the LRT indicated that the potential confounders had a significant effect on the odds ratio, again based on a p value <0.05, these were included into the final model.

It was also endeavoured to explore the association between binge drinking during the first month of university (SUS2) and binge drinking later in the academic year (SUS3 or SUS4), and the association between how frequently students binged from SUS1 to SUS2, and SUS2 to SUS3/4. However, as the number of linked responses were not of sufficient quantity (**Figure 4.3**) the regressions were not run.

4.2.5 Ethical approval and considerations

This study was granted ethical approval by the Faculty of Medicine & Health Sciences Research Ethics Committee at the University of Nottingham (reference number: B14062016

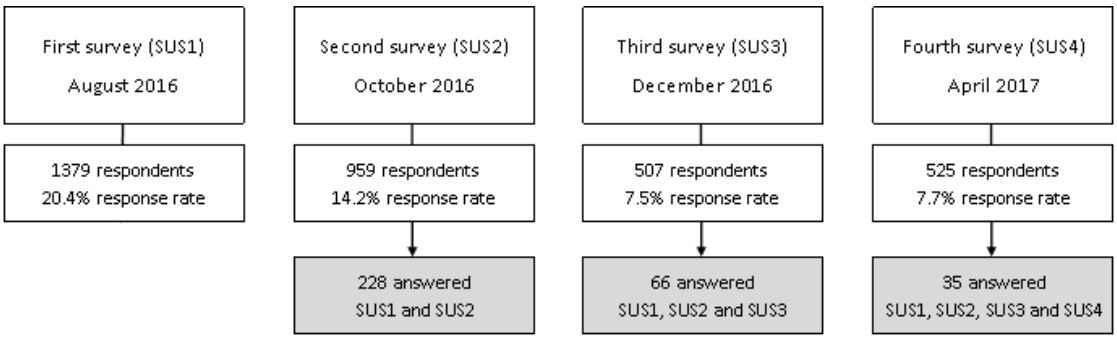
SoM EPD). Prior to ethical approval, permissions to include the drinking behaviour questions in the online surveys were sought and granted by the SU (**Appendix 8.5** for letter of approval). All datasets sent to the researcher were fully anonymised by the SU, which were then kept on a password-protected computer accessible only to the researcher and research supervisors.

4.3 Results

4.3.1 Population characteristics

There were 6762 registered first year undergraduate students at the University in the 2016/17 academic year. Figure 4.3 shows the number of respondents and response rate for each survey and the numbers that completed more than one survey.

Figure 4.3 Response to each survey (n, %) and the number of respondents completing more than one survey



The first survey received the highest response, representing 20.4% of the first year undergraduate population at the University. This reduced to 14.2% at the second time point and then again to 7.5%/7.7% at the third and fourth time points, respectively. Table 4.3

describes the characteristics of first year undergraduate students at the University and of those that responded to each survey.

Table 4.3 Characteristics of first year undergraduates in each survey, n (%*)

	Registered first year undergraduates 2016-17 (N=6762)	**SUS 1** (N=1379)	**SUS 2** (N=959)	**SUS 3** (N=507)	**SUS 4** (N=525)
Gender					
Missing	-	1 (0.1)	2 (0.2)	1 (0.2)	0 (0.0)
Male	3302 (48.8)	476 (34.5)	362 (37.8)	188 (37.1)	192 (36.6)
Female	3460 (51.2)	892 (64.7)	590 (61.5)	314 (61.9)	331 (63.1)
I'll describe in my own words	-	5 (0.4)	1 (0.1)	2 (0.4)	1 (0.2)
Prefer to not say	-	5 (0.4)	4 (0.4)	2 (0.4)	1 (0.2)
Age					
Missing	-	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Under 18	217 (3.2)	29 (2.1)	15 (1.6)	6 (1.2)	3 (0.6)
18 – 21	6198 (91.7)	1266 (91.8)	879 (91.7)	470 (92.7)	495 (94.3)
22 – 25	206 (3.0)	37 (2.7)	31 (3.2)	14 (2.8)	14 (2.7)
26 – 34	85 (1.3)	28 (2.0)	23 (2.4)	9 (1.8)	8 (1.5)
35 – 44	31 (0.5)	13 (0.9)	6 (0.6)	5 (1.0)	3 (0.6)
45 – 64	25 (0.4)	5 (0.4)	5 (0.5)	3 (0.6)	2 (0.4)
Prefer to not say	-	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)
Fee status					
Missing	-	5 (0.4)	6 (0.6)	3 (0.6)	0 (0.0)
UK	5827 (86.2)	1153 (83.6)	802 (83.6)	447 (88.2)	465 (88.6)
European Union	285 (4.2)	77 (5.6)	55 (5.7)	19 (3.8)	26 (5.0)
International	650 (9.6)	144 (10.4)	96 (10.0)	38 (7.5)	34 (6.5)
Ethnicity					
Missing	-	5 (0.4)	5 (0.5)	-	-
White	4666 (69.0)	1005 (72.9)	719 (75.0)	-	-
Black / African / Caribbean / Black British	413 (6.1)	76 (5.5)	42 (4.4)	-	-
Asian / Asian British	1164 (17.2)	213 (15.5)	125 (13.0)	-	-
Mixed / Multiple ethnic groups	338 (5.0)	63 (4.6)	43 (4.5)	-	-
Other	113 (1.7)	17 (1.2)	13 (1.4)	-	-
Unsure	-	0 (0.0)	7 (0.7)	-	-
Prefer to not say	68 (1.0)	0 (0.0)	5 (0.5)	-	-

Table 4.3 continued:

	Registered first year undergraduates 2016-17 (N=6762)	**SUS 1** (N=1379)	**SUS 2** (N=959)	**SUS 3** (N=507)	**SUS 4** (N=525)
Full / part-time					
Missing	-	0 (0.0)	-	0 (0.0)	-
Full-time	6744 (99.7)	1376 (99.8)	-	503 (99.2)	-
Part-time	18 (0.3)	3 (0.2)	-	4 (0.8)	-
Faculty					
Missing	-	52 (3.8)	19 (2.0)	5 (1.0)	6 (1.1)
A	1279 (18.9)	215 (15.6)	164 (17.1)	109 (21.5)	92 (17.5)
B	838 (12.4)	151 (11.0)	101 (10.5)	58 (11.4)	34 (6.5)
C	1002 (14.8)	287 (20.8)	190 (19.8)	101 (19.9)	115 (21.9)
D	1636 (24.2)	415 (30.1)	283 (29.5)	130 (25.6)	162 (30.9)
E	2007 (29.7)	259 (18.8)	202 (21.1)	104 (20.5)	116 (22.1)

*Percentages have been rounded to 1 decimal place

The majority of respondents were female, from the UK, of white ethnicity, studying full-time and in the 18-21 age category. Just over a third of the respondents were male at each time point, compared to nearly half of the wider student population. International students and those of Asian or Black minorities were slightly under-represented in the later time points. Students from all five faculties were represented across the surveys, although overall there were higher proportions of students from Faculties C and D relative to the proportion in the whole population.

4.3.2 Drinking status

There was a significant difference in the proportion of drinkers, current and lifetime non-drinkers across the four time points ($\chi^2 = 51.6$, $p<0.001$). At each time point, around three-quarters of students reported that they drank alcohol (Table 4.4) although there was a much higher proportion of drinkers at SUS3. A reduction in the proportion of never drinkers is seen

after SUS2 and across the academic year. In the independent samples analysis, there was no change to these findings (Table 4.4a) ($\chi^2 = 46.7$, $p<0.001$).

Table 4.4 Drinking status – current, never and ever drinkers at each time point, n (%*)

	SUS 1 (N=1379)	**SUS 2** (N=959)	**SUS 3** (N=507)	**SUS 4** (N=525)
Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Current drinker	1075 (78.0)	711 (74.1)	435 (85.8)	395 (75.2)
Current abstainer	154 (11.2)	127 (13.2)	29 (5.7)	93 (17.7)
Lifelong abstainer	150 (10.9)	121 (12.6)	43 (8.5)	37 (7.1)

$\chi^2 = 51.6$, $p<0.001$; *Percentages have been rounded to 1 decimal place

Table 4.4a Drinking status – current, never and ever drinkers at each time point (using independent samples), n (%*)

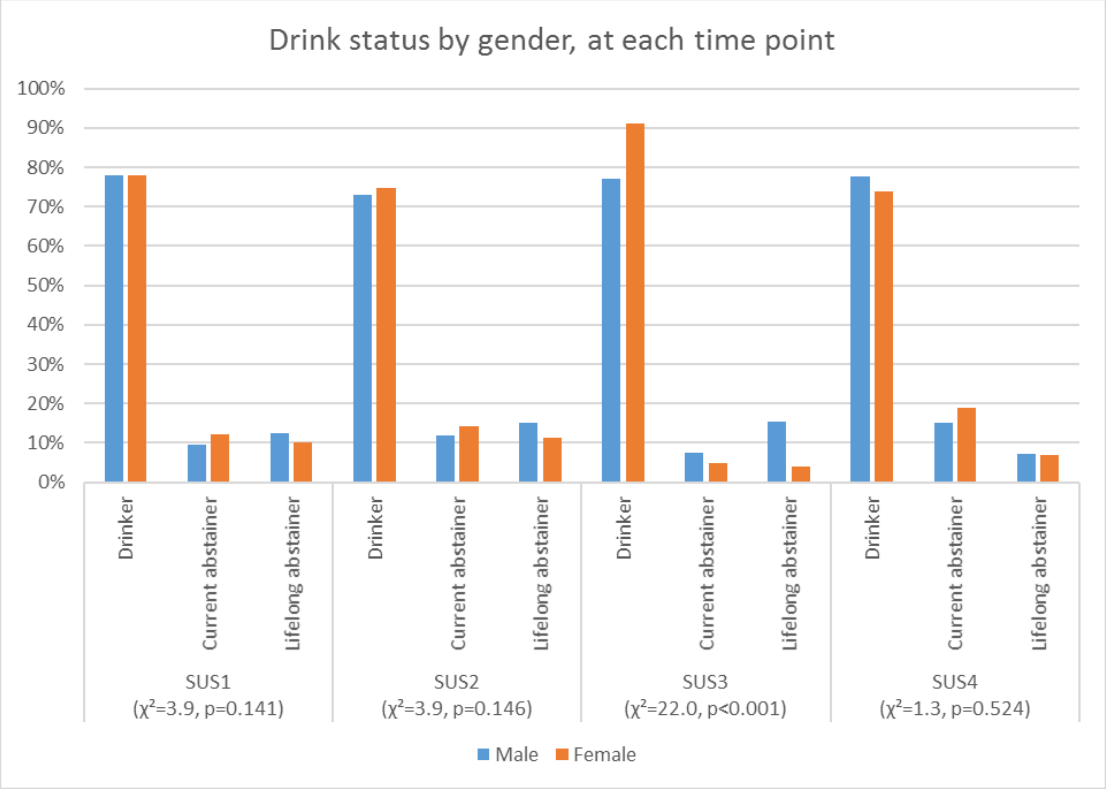
	SUS 1 (N=1201)	**SUS 2** (N=755)	**SUS 3** (N=372)	**SUS 4** (N=445)
Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Current drinker	929 (77.4)	558 (73.9)	317 (85.2)	332 (74.6)
Current abstainer	132 (11.0)	105 (13.9)	22 (5.9)	84 (18.9)
Lifelong abstainer	140 (11.7)	92 (12.2)	33 (8.9)	29 (6.5)

$\chi^2 = 46.7$, $p<0.001$; *Percentages have been rounded to 1 decimal place

There were similar proportions of male and female drinkers across the year (Figure 4.4), with the exception of SUS3. A much higher proportion of female drinkers was observed at the end of the first semester (SUS3: M 77.1%/F 91.1%) compared to the other time points.

Figure 4.4 Drinking status by gender at each time point

(Table with figures in **Appendix 8.6**)



4.3.3 Drinking frequency

There was a statistically significant difference in frequency of drinking across the four time points (Table 4.5 (χ^2=148.6, p<0.001)). Prior to joining university, the majority of students reported drinking 2-3 times a month or 1-2 times a week. In the first month of university, a higher proportion of students reported drinking at least once or multiple times a week. The proportion drinking on more than a weekly basis later in the academic year reduced slightly, but remained higher than prior to joining university. In the independent samples analysis, there was no change to these findings (Table 4.5a) (χ^2=135.7, p<0.001). At each time point, males drank more frequently than females (Table 4.6).

Table 4.5 Frequency of drinking in the past month among current drinkers at each time point, n (%*)

	SUS 1 (N=1075)	**SUS 2** (N=711)	**SUS 3** (N=435)	**SUS 4** (N=395)
Once a month	141 (13.1)	60 (8.4)	36 (8.3)	42 (10.6)
2-3 times/month	377 (35.1)	121 (17.0)	101 (23.2)	121 (30.6)
1-2 times/week	409 (38.1)	305 (42.9)	201 (46.2)	167 (42.3)
3-4 times/week	120 (11.2)	167 (23.5)	76 (17.5)	52 (13.2)
5-6 times/week	21 (2.0)	46 (6.5)	14 (3.2)	9 (2.3)
Every day	7 (0.7)	12 (1.7)	7 (1.6)	4 (1.0)

χ^2=148.6, p<0.001; *Percentages have been rounded to 1 decimal place

Table 4.5a - Frequency of drinking in the past month among current drinkers at each time point (using independent samples), n (%*)

	SUS 1 (N=929)	**SUS 2** (N=558)	**SUS 3** (N=317)	**SUS 4** (N=332)
Once a month	121 (13.0)	47 (8.4)	28 (8.9)	31 (9.3)
2-3 times/month	331 (35.6)	95 (17.0)	60 (18.9)	98 (29.5)
1-2 times/week	354 (38.1)	241 (43.2)	155 (48.9)	143 (43.1)
3-4 times/week	99 (10.7)	130 (23.3)	59 (18.6)	48 (14.5)
5-6 times/week	18 (1.9)	38 (6.8)	10 (3.2)	8 (2.4)
Every day	6 (0.7)	7 (1.3)	5 (1.6)	4 (1.2)

χ^2=135.7, p<0.001; *Percentages have been rounded to 1 decimal place

Table 4.6 Frequency of drinking in the past month by gender at each time point, n (%*)

	SUS 1		SUS 2		SUS 3		SUS 4	
	Male (N=371)	**Female** (N=695)	**Male** (N=264)	**Female** (N=440)	**Male** (N=145)	**Female** (N=286)	**Male** (N=149)	**Female** (N=245)
Once a month	37 (10.0)	101 (14.5)	22 (8.3)	37 (8.4)	11 (7.6)	25 (8.7)	8 (5.4)	34 (13.9)
2-3 times/ month	109 (29.4)	264 (38.0)	28 (10.6)	92 (20.9)	30 (20.7)	71 (24.8)	36 (24.2)	84 (34.3)
1-2 times/ week	147 (39.6)	261 (37.6)	98 (37.1)	206 (46.8)	50 (34.5)	148 (51.8)	67 (45.0)	100 (40.8)
3-4 times/ week	64 (17.3)	56 (8.1)	83 (31.4)	83 (18.9)	39 (26.9)	36 (12.6)	28 (18.8)	24 (9.8)
5-6 times/ week or more often	14 (3.8)	13 (1.9)	33 (12.5)	22 (5.0)	15 (10.3)	6 (2.1)	10 (6.7)	3 (1.2)
	χ^2=30.9, p<0.001		χ^2=36.8, p<0.001		χ^2=31.9, p<0.001		χ^2=23.9 , p<0.001	

*Percentages have been rounded to 1 decimal place

4.3.4 Units drunk in past month

The median number of units drunk in the past month increased from 26.8 units (10.8-57.2) at SUS1 to 33.0 units (5.7-84.0) at SUS2 and remained elevated throughout the academic year (Table 4.7). The Kruskal-Wallis H test showed that there was not a statistically significant difference between the four time points (χ^2 with 3 d.f. = 3.33, p=0.344). However, as illustrated in Figure 4.5, the highest intakes were observed during the first month of university.

Table 4.7 Total usual units drunk in the past month among current drinkers at each time point, median (IQR)

	SUS 1 (N=1065)	**SUS 2** (N=704)	**SUS 3** (N=430)	**SUS 4** (N=391)	p value
Whole sample	26.8 (10.8-57.2)	33.0 (5.7-84.0)	32.1 (7.7-73.3)	33.1 (9.1-64.5)	0.344

Kruskal Wallis H test = 3.33 (3 d.f.)

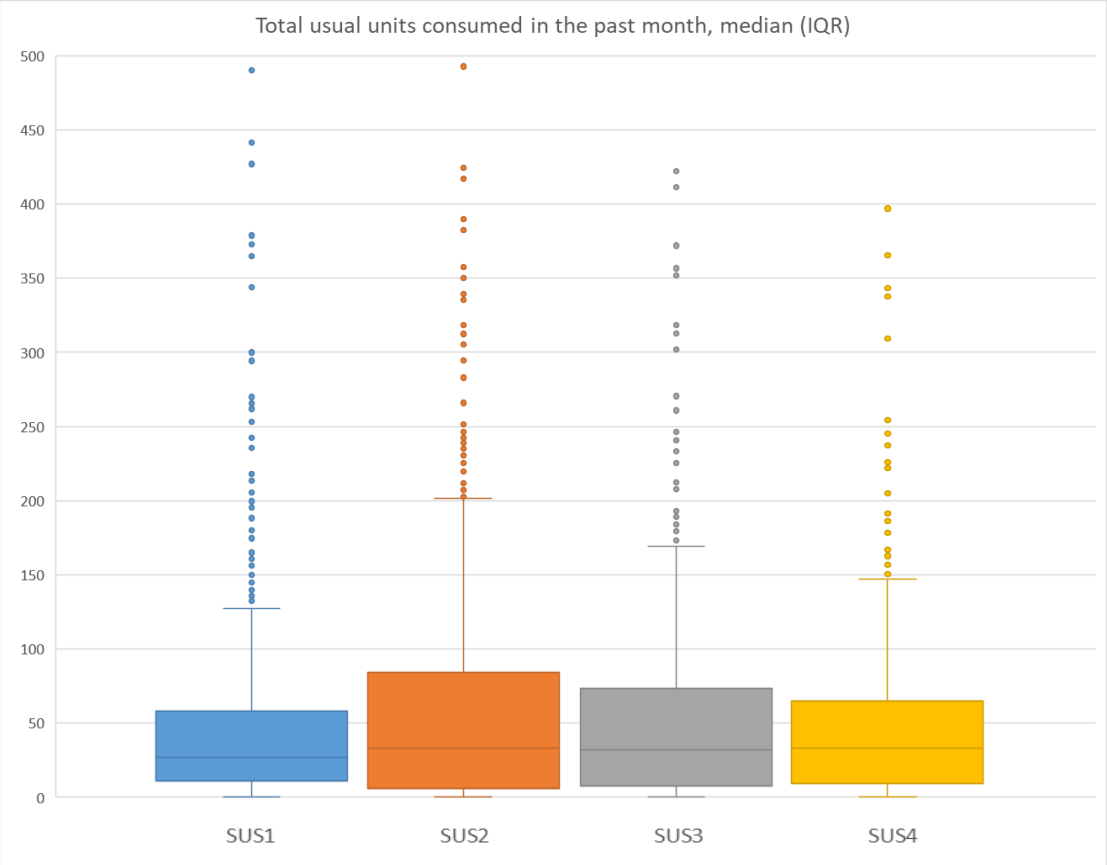
Table 4.8 Total usual units drunk in the past month by gender at each time point, median (IQR)

	SUS 1		**SUS 2**		**SUS 3**		**SUS 4**	
	Male (N=364)	**Female** (N=692)	**Male** (N=258)	**Female** (N=440)	**Male** (N=141)	**Female** (N=285)	**Male** (N=146)	**Female** (N=244)
Median units (IQR)	34.1 (13.6-72.2)	23.9 (9.8-49.8)	48.7 (11.3-112.0)	26.9 (4.0-65.5)	47.1 (12.3-131.9)	26.4 (7.1-61.7)	36.5 (11.4-85.0)	31.5 (6.6-55.6)
p value*	<0.001		<0.001		<0.001		0.092	

*Wilcoxon rank sum test

Throughout the year males drank more than females, although there was not a statistically significant difference in median units at the final time point (Table 4.8). A large increase in median units was observed for males between SUS1 and SUS2. This remained elevated at SUS3 and returned to pre-university levels in the second semester. Conversely, for females a modest increase in median units was observed from SUS1 to SUS2, which remained similar at SUS3. An increase was then observed at the end of the second semester.

Figure 4.5 Total usual units consumed in past month at each time point



The shaded area indicates the median (shown as a line) and interquartile range, the whiskers indicate variability outside the upper and lower quartiles, and points outside the whiskers indicate the outliers

4.3.5 Binge drinking occasions

Table 4.9 shows the frequency that current drinkers reported binge drinking (6-11 drinks) at each time point, broken down by frequency category. The chi-squared test showed that there was a statistically significant difference in the frequency of drinking 6-11 drinks on a single occasion between the four time points ($\chi^2 = 246.41$, $p < 0.001$), showing that there was a difference across the four time points in the proportion of students engaging in these binge drinking sessions at different frequencies. 81.4% of students reported that they had ever drunk in this quantity prior to joining university; of which 47.1% did at least once in the past month and 12.8% did at least once a week in the past month.

Table 4.9 Frequency of binge drinking occasions among current drinkers at each time point, by frequency category (6-11 drinks per occasion), n (%*)

	SUS 1 (N=1075)	**SUS 2** (N=711)	**SUS 3** (N=435)	**SUS 4** (N=395)
Missing	3 (0.3)	29 (4.1)	9 (2.1)	11 (2.8)
Never	196 (18.2)	111 (15.6)	47 (10.8)	47 (11.9)
Not in the past month	231 (21.5)	93 (13.1)	64 (14.7)	81 (20.5)
Once a month	241 (22.4)	100 (14.1)	84 (19.3)	79 (20.0)
2-3 times/month	266 (24.7)	109 (15.3)	95 (21.8)	89 (22.5)
1-2 times/week	111 (10.3)	185 (26.0)	113 (26.0)	64 (16.2)
3-4 times/week or more often	27 (2.5)	84 (11.8)	23 (5.3)	24 (6.1)

$\chi^2 = 240.32$, $p<0.001$; *Percentages have been rounded to 1 decimal place

The frequency of drinking 6-11 drinks appears to increase upon arrival to university with a higher proportion reporting doing so on at least a weekly basis (Figure 4.6). The proportion of students drinking on at least a weekly basis remained elevated at each time point, with the highest proportion of students drinking in this quantity was observed at SUS3. There was

a reduction between SUS1 and SUS3 in the proportion of students reporting having never drunk in this quantity (Table 4.9).

The independent samples analysis showed no change to the statistical significance of these findings (Table 4.9a) (χ^2 = 224.7, p<0.001). 80.7% reported they had ever drunk in this quantity prior to joining university; of which 46.5% did at least once in the past month and 13.2% did at least once a week in the past month. The previously observed pattern in the proportion of students drinking this quantity at different frequencies across the year remained the same (Figure 4.6a).

4.9a Frequency of binge drinking occasions among current drinkers at each time point, by frequency category (6-11 drinks per occasion, using independent samples), n (%*)

	SUS 1 (N=929)	**SUS 2** (N=558)	**SUS 3** (N=317)	**SUS 4** (N=332)
Missing	2 (0.2)	28 (5.0)	7 (2.2)	10 (3.0)
Never	177 (19.1)	86 (15.4)	32 (10.1)	37 (11.1)
Not in the past month	195 (21.0)	75 (13.4)	38 (12.0)	65 (19.6)
Once a month	205 (22.1)	78 (14.0)	59 (18.6)	63 (19.0)
2-3 times/month	227 (24.4)	74 (13.3)	72 (22.7)	76 (22.9)
1-2 times/week	97 (10.4)	146 (26.2)	87 (27.4)	59 (17.8)
3-4 times/week or more often	26 (2.8)	71 (12.7)	22 (6.9)	22 (6.6)

χ^2=224.7, p<0.001; *Percentages have been rounded to 1 decimal place

Figure 4.6 Proportion of students binge drinking on at least a monthly, or weekly, basis in the past month at each time point (6-11 drinks per occasion)

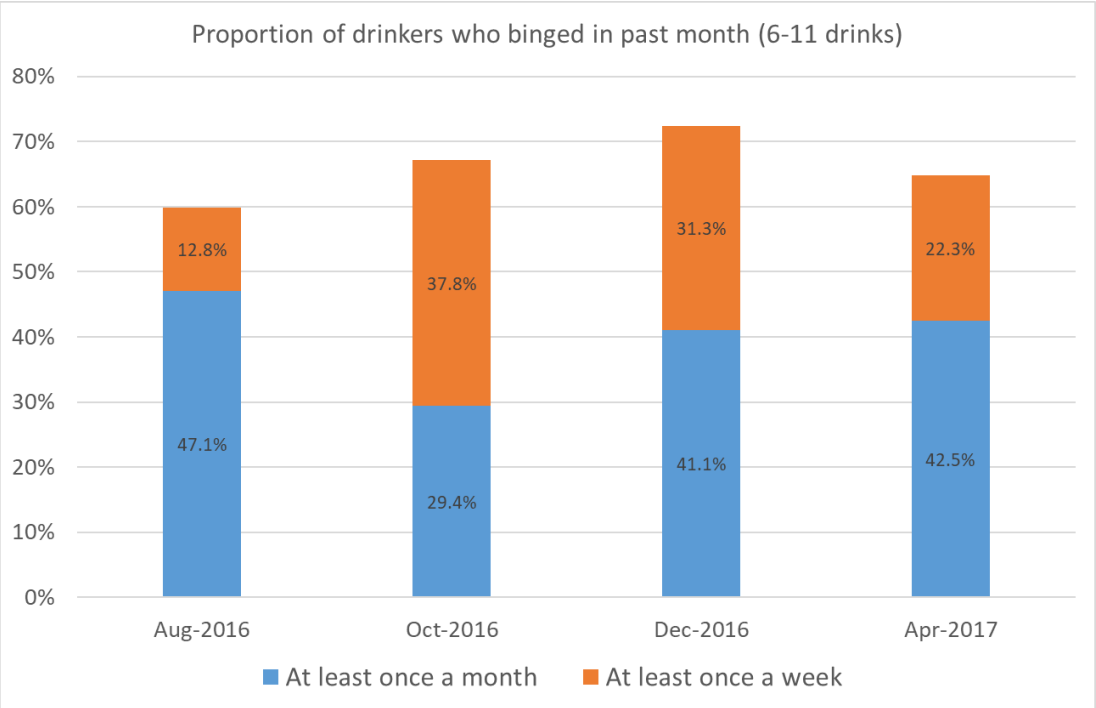


Figure 4.6a – Proportion of students' binge drinking on at least a monthly, or weekly, basis in the past month at each time point (6-11 drinks per occasion, using independent samples)

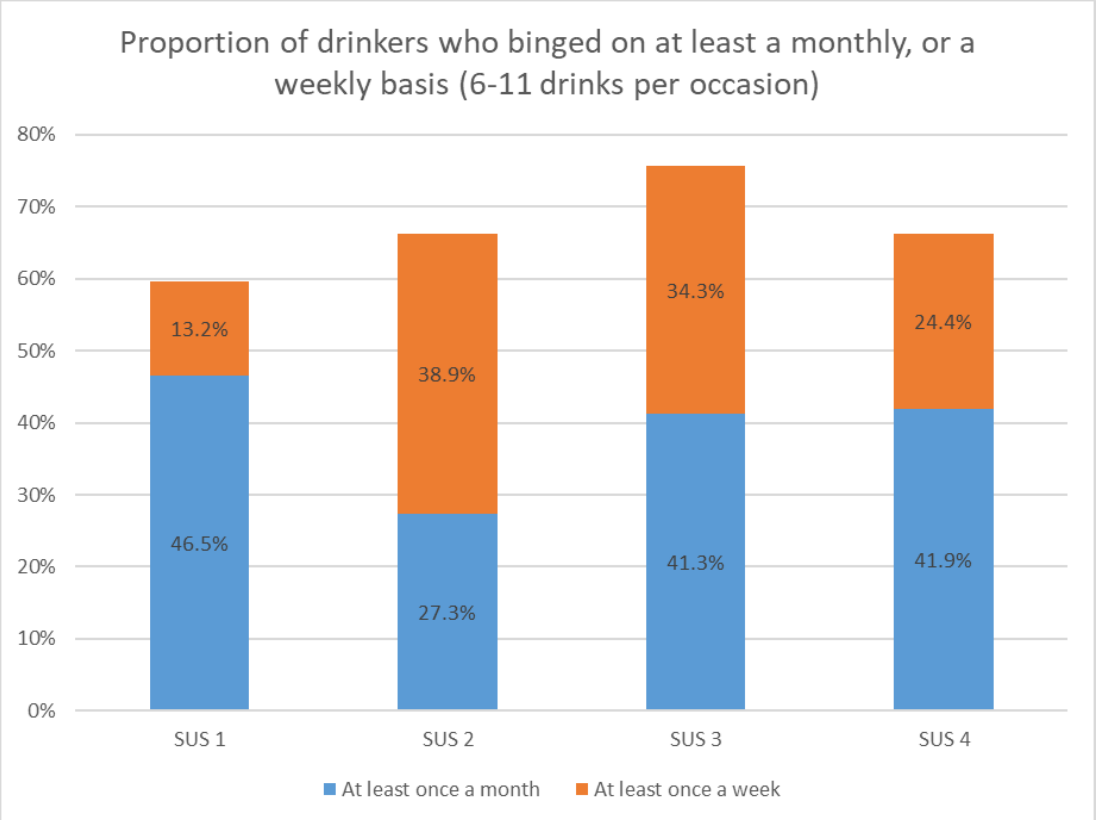


Table 4.10 shows the frequency that current drinkers reported drinking 12 or more drinks at each time point, broken down by frequency category. Overall, less students reported that they drank more than 12 drinks on a single occasion compared to 6-11 drinks, although a similar pattern in the proportions drinking in both quantities across the year was observed.

Table 4.10 Frequency of binge drinking occasions among current drinkers at each time point, by frequency category (12+ drinks per occasion), n, (%*)

	SUS 1 (N=1075)	**SUS 2** (N=711)	**SUS 3** (N=435)	**SUS 4** (N=395)
Missing	1 (0.1)	32 (4.5)	10 (2.3)	13 (3.3)
Never	568 (52.8)	307 (43.2)	169 (39.9)	129 (32.7)
Not in the past month	215 (20.0)	102 (14.4)	78 (17.9)	109 (27.6)
Once a month	145 (13.5)	96 (13.5)	69 (15.9)	60 (15.2)
2-3 times/ month	86 (8.0)	58 (8.2)	49 (11.3)	44 (11.1)
1-2 times/ week	56 (5.2)	75 (10.6)	42 (9.7)	30 (7.6)
3-4 times/ week or more often	4 (0.4)	41 (5.8)	18 (4.1)	10 (2.5)

χ^2=172.4.0, p<0.001; *Percentages have been rounded to 1 decimal place

Table 4.10a Frequency of binge drinking occasions among current drinkers at each time point, by frequency category (12+ drinks per occasion, using independent samples), n (%*)

	SUS 1 (N=929)	**SUS 2** (N=558)	**SUS 3** (N=317)	**SUS 4** (N=332)
Missing	1 (0.1)	29 (5.2)	9 (2.8)	13 (3.9)
Never	486 (52.3)	236 (42.3)	116 (36.6)	103 (31.0)
Not in the past month	191 (20.6)	80 (14.3)	49 (15.5)	89 (26.8)
Once a month	122 (13.1)	71 (12.7)	54 (17.0)	53 (16.0)
2-3 times/month	77 (8.3)	42 (7.5)	39 (12.3)	36 (10.8)
1-2 times/week	49 (5.3)	63 (11.3)	36 (11.4)	28 (8.4)
3-4 times/week or more often	3 (0.32)	37 (6.6)	14 (4.4)	10 (3.0)

χ^2=173.0, p<0.001; *Percentages have been rounded to 1 decimal place

The chi-squared test showed that there was a statistically significant difference between the four time points ($\chi^2 = 182.39$, $p < 0.001$), showing that there was a difference across the four time points in the proportion of students engaging in heavier binge drinking sessions at different frequencies. 47.1% reported having ever drunk in this quantity prior to joining university. There was an increase in the proportion of students who reported drinking in this quantity on at least a weekly basis upon arrival to university (Figure 4.7). This remained elevated throughout the year with the highest proportions observed at SUS3. The proportion of students reporting that they had never drunk this quantity reduced throughout the year (Table 4.10).

As with the 6-11 drinks measure, the independent samples analysis showed no change to the statistical significance of these findings (Table 4.10a) ($\chi^2=173.0$, $p<0.001$). 47.6% reported they had ever drunk in this quantity prior to joining university; of which 21.4% did at least once in the past month and 5.6% did at least once a week in the past month. Again, the previously observed pattern in the proportion of students drinking this quantity at different frequencies across the year remained the same (Figure 4.7a).

Across the year, males binged more frequently than females (this was statistically significant for all bar the final time point for the 6-11 drinks measure) and higher proportions of females reported that they had never drunk between 6-11 or 12+ drinks on a single occasion (Tables presented in **Appendices 8.7 and 8.8**).

Figure 4.7 Proportion of students binge drinking on at least a monthly, or weekly, basis in the past month, at each time point (12+ drinks per occasion)

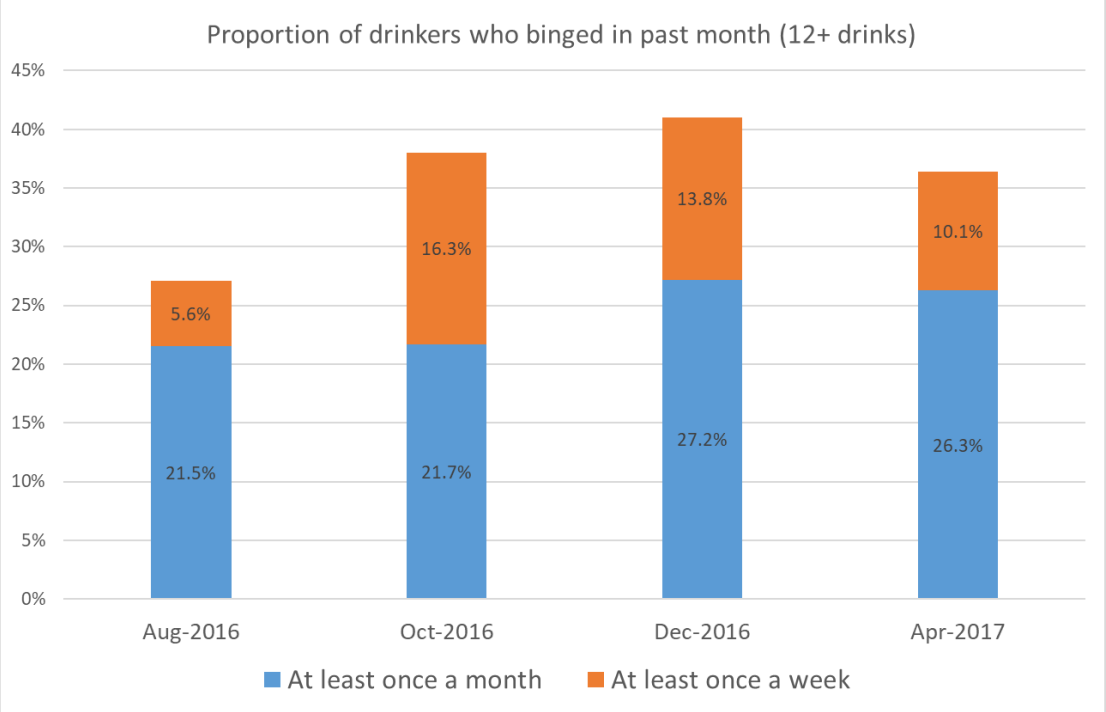
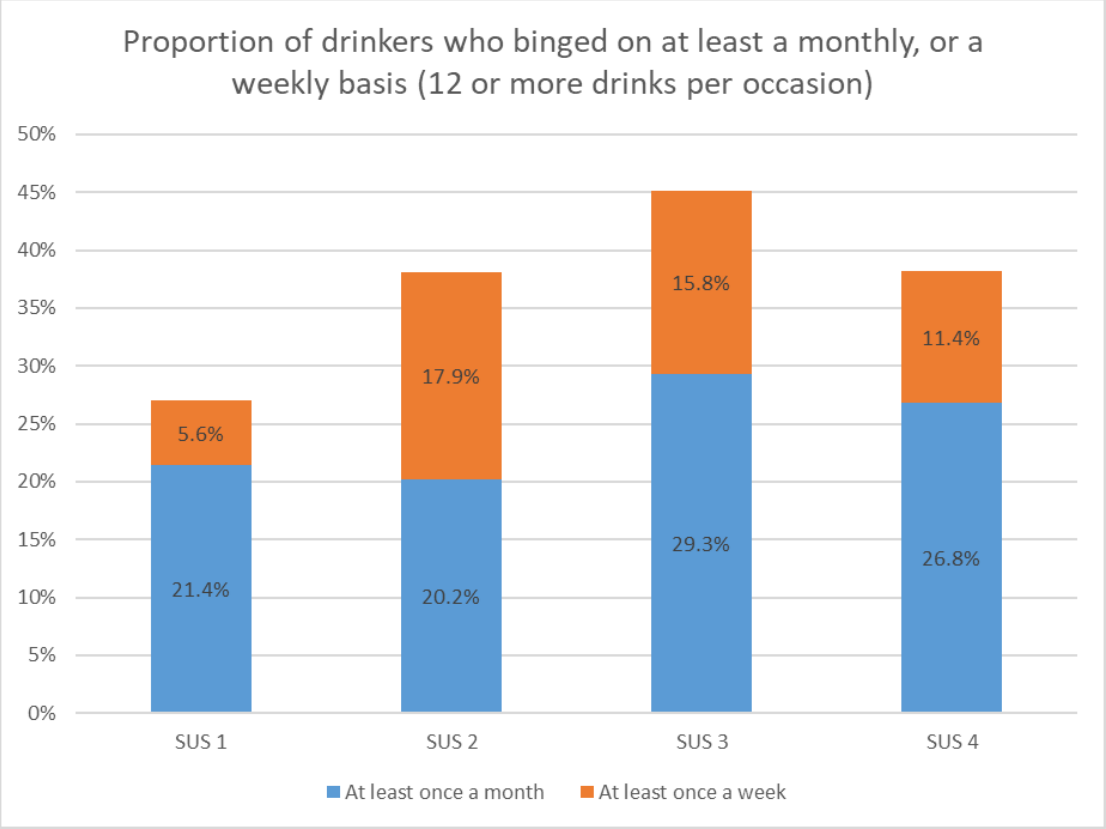


Figure 4.7a – Proportion of students' binge drinking on at least a monthly, or weekly, basis in the past month, at each time point (12+ drinks per occasion, using independent samples)



4.3.6 Drinking context

Table 4.11 displays the usual time of drinking, location of drinking and company when drinking for the four drink-types at SUS2.

Table 4.11 Usual context of drinking among current drinkers by drink type, n, (%*)

	Beer	Wine	Spirits	Alcopops
When	(N=436)	(N=435)	(N=613)	(N=190)
With a meal	86 (19.7)	271 (62.3)	6 (1.0)	5 (2.6)
At another time	350 (80.3)	164 (37.7)	607 (99.0)	185 (97.4)
Where	(N=425)	(N=399)	(N=574)	(N=185)
Pub, bar or nightclub	155 (36.5)	28 (7.0)	273 (47.6)	87 (47.0)
At home	96 (22.3)	148 (37.1)	35 (6.1)	18 (9.7)
Home followed by pub, bar or nightclub	99 (23.3)	75 (18.8)	223 (38.9)	58 (31.4)
At a friend's house	43 (10.1)	38 (9.5)	34 (5.9)	17 (9.2)
At a restaurant	21 (4.9)	103 (25.8)	4 (0.7)	1 (0.5)
Outdoors	8 (1.9)	1 (0.3)	4 (0.7)	1 (0.5)
Other	3 (0.7)	6 (1.5)	1 (0.2)	3 (1.6)
With whom	(N=383)	(N=356)	(N=522)	(N=165)
Friends	328 (85.6)	187 (52.5)	492 (94.3)	154 (93.3)
Family	49 (12.8)	159 (44.7)	16 (3.1)	4 (2.4)
Strangers	0 (0.0)	2 (0.6)	7 (1.3)	3 (1.8)
Alone	6 (1.6)	8 (2.3)	7 (1.3)	4 (2.4)

*Percentages have been rounded to 1 decimal place

Most students who reported drinking beer, spirits and alcopops typically did so at another time to a meal. Of those who drank wine, most did so with a meal although nearly 40% reported drinking without a meal. Most students reported drinking all drink types with friends, although many reported that they usually drank wine with a family member.

The majority of students reported that they drank at home, in a drinking venue (pub, bar or nightclub) or at home followed by a drinking venue. Beer, spirits and alcopops were most commonly drunk in a drinking venue or at home followed by a drinking venue, similar

proportions drank beer exclusively at home and at home followed by a drinking venue. Wine was most commonly drunk at home or in a restaurant.

4.3.7 Association between ever binge drinking prior to university and binge drinking upon arrival to university

There were 180 students who completed both SUS1 and SUS2 and were included in the longitudinal analysis. Table 4.12 shows odds ratios for the univariable associations between characteristics of the study participants and binge drinking in the first month of university. Similar to the cross-sectional analyses, the majority of respondents were female, of white ethnicity, aged 18-21, and UK fee paying students studying full-time.

Table 4.12 Univariable associations between participant characteristics and binge drinking in the first month of university

Characteristic	*n*	Odds ratio for binge drinking in first month (95% CI)	P value
Gender			
Male	56	1.0	0.043
Female	124	0.49 (0.25-0.98)	
Age			
<21	169	1.0	0.008
>21	11	0.12 (0.02-0.57)	
Ethnicity			
White	152	1.0	0.613
Non-white	24	1.0 (0.98-1.03)	
Missing	4	-	
Fee status			
UK	165	1.0	0.461
Non-UK	15	0.67 (0.23-1.93)	

At the univariable level, gender and age were statistically significantly associated with binge drinking in the first month of university. The odds of females binge drinking in the past month were 51% lower than the odds of males binge drinking in the past month, although

the confidence intervals were wide (OR 0.49, 95% CI 0.25-0.98). The odds of those over the age of 21 binge drinking were 88% lower in the first month of university compared to those under 21.

In the multivariable model only age was identified as a confounder in the association between binge drinking at SUS1 and binge drinking at SUS2; Table 4.13 presents the unadjusted and adjusted odds ratios. Accounting for age, students who had ever binged prior to joining university were 14 times more likely to binge during the first month of university (95% CI 5.6 – 34.8, p<0.001).

Table 4.13 Odds ratios (95% CI) for binge drinking in first month of university (SUS2)

	Unadjusted OR (n=180)		**Adjusted OR* (n=180)**	
Binge prior to university				
Never	1.0		1.0	
Ever	15.0 (6.1-36.9)	P<0.001	14.0 (5.6-34.8)	P<0.001

*Adjusted for age

4.4 Discussion

This study explored drinking behaviour prior to and across the academic year among first year undergraduate students. 78% of students reported that they were drinkers before entry into university which remained largely similar across the year (with the exception of SUS3) and of these, many had engaged in binge drinking prior to joining university (46.5%/13.2% had drunk between 6 and 11 drinks on a single occasion at least once or once a week in the past month, and 21.4%/5.6% had drunk more than 12 drinks on a single occasion at least

once or once a week in the past month). Of the current drinkers, many came to university drinking on at least a bi-monthly or weekly basis, with higher proportions drinking on a more frequent basis upon arrival to university. This suggests that although arrival to university does not trigger the onset of drinking for many, it may trigger a change in drinking habits. The proportion drinking at higher frequencies throughout the year compared to before university remained elevated, although the end of the first semester (SUS3) was associated with the most frequent binge drinking: 34.3%/41.3% drank between 6 and 11 drinks on a single occasion at least once or once a week in the past month, and 29.3%/15.8% drank more than 12 drinks on a single occasion at least once or once a week in the past month.

The findings at SUS1 highlight that many students join university having already engaged in binge drinking or doing so on a regular basis, suggesting that many young adults establish this style of drinking whilst still at school. Results from the logistic regression also showed that those who had ever engaged in binge drinking prior to university were 14 times more likely to do so in the first month of university, suggesting that binge drinking before university could be an important predictor of drinking in this harmful pattern whilst at university. It is important to interpret these findings with caution, however, given the small sample size. There is limited evidence on the drinking habits of 16-18 year olds in the UK, as they are typically grouped with adults (16 – 24 years) in population surveys. Binge drinking among younger adolescents (11-15 years) is also not measured in the SDDUYP survey (104). In 2008, Armitage explored drinking behaviour among 11 – 18 year olds at two comprehensive schools in England and found that progressively higher proportions of adolescents had engaged in a binge drinking session in the past week as age increased (11-13 years, 6.7%; 14-15 years, 37.2%; 16-18 years, 62.4%), although binge drinking was assessed using a lower threshold than for adults (106). In the 2011 ESPAD study (182), 52% of 15-16

year olds in the UK reported drinking more than 5 drinks on a single occasion in the past month. Our findings appear to compliment these findings, showing that many students engage in binge drinking in the year before university, and that just before university it may be an established drinking pattern for some. However, neither of the above studies reported on frequency of binge drinking nor give us an idea of when this behaviour is established and develops. More studies exploring the drinking habits of 16-18 year olds using adult-measures of binge drinking (and hazardous drinking) are needed in order to assess this. This will be important in determining the most effective time to take preventative action to help to prevent this drinking pattern from developing.

The findings show that not only did students come to university having already engaged in drinking and binge drinking, but that many began binge drinking in greater quantities and frequencies upon arrival to university and continued to do so past the first month. To the researchers' knowledge this is the first study to present the proportions of students' binge drinking split by the number of drinks, showing that a higher proportion of students drank more than 12 drinks on a single occasion, and did so in higher frequencies upon arrival to university. This suggests that arrival into the university environment may trigger a change in students' pattern of drinking and that this transition point could be an important time to intervene, either in a university setting, or just before the point of arrival. Despite trends showing a drop in overall alcohol consumption among adolescents (75) and young adults (183), this study suggests that this may not necessarily be translated into reduced alcohol consumption among student populations.

There are two previous studies which have also measured binge drinking prevalence in the past month among university students in the UK. Compared with our measure of drinking 6-

11 drinks on a single occasion, they found slightly higher rates of binge drinking. Woolfson & MacGuire in 2010 (45) reported that 82% of students engaged in binge drinking in the past month, although this was a small sample of 64 Scottish undergraduate students so is not representative of the wider student population. In another, but larger, 2010 study of 380 students from all years of study, El Ansari (44) reported higher proportions of students binge drinking at least once a week (53.8%) and lower proportions of students who did not binge in the past month (20.4%), although this study used a slightly lower measure of binge drinking (5 or more drinks on a single occasion) than the one used in this study. However, given that the findings in this study have been split into two levels of binge drinking and taking into account many students reported drinking 6 – 11 as well as more than 12 drinks on a single occasion, these findings are broadly comparable.

There were similar proportions of male and female drinkers across the year, except for SUS3 where there was a much higher proportion of female drinkers. At each time point, males drank more frequently, in greater quantities and binge drank more frequently than females, although in SUS4 the difference in median units was not statistically significant. These findings are consistent with previous studies exploring student drinking; in El Ansari & Stock's study (44) males too reported more frequent binge drinking than females and more females reported not bingeing in the past month. Dodd also found that males reported more episodes of binge drinking than females in a seven day period (184). It has been suggested that over the past two decades differences in drinking patterns between male and female university students in the UK are converging (88) with some studies not finding a difference in hazardous drinking (as measured by AUDIT) between genders (93, 185) but the findings of this study do not uphold this observation. It is possible that this study has overestimated how much and how frequently male students drink because they were underrepresented at

each time point, although this was also true of the aforementioned studies which found no difference between genders. In addition, Heather et al. (who found no difference between male and female students) (93) took a purposive approach targeting sports-based courses where possible and so it could be that the high AUDIT scores obtained are due to atypically high levels of drinking among females and males on course of this type. Despite the differences observed, and taking into consideration females' innate susceptibility to the effect of and damage from alcohol compared to males (186), that there were many females in this study drinking in high quantities and engaging in regular binge drinking sessions highlights that drinking remains a behaviour of concern for both sexes.

The usual time of drinking, location of drinking and company when drinking for the four drink types (beer, wine, spirits and alcopops) were also explored. The findings show that the majority of student drinking occurs without a meal and with friends, exclusively in pubs, bars and nightclubs or at home followed by one of these drinking venues. Wine was the exception to this, most commonly drunk with a meal, at home or in a restaurant, with much higher proportions drinking it with a family member compared to beer, spirits or alcopops. Spirits appear to be the dominant drink of choice for students who reported pre-loading, with 38.9% students who reported drinking spirits usually drinking it at home followed by a bar, pub or nightclub. Of those who reported drinking the following beverages, 23.3% drank beer, 18.8% drank wine and 31.4% drank alcopops also reported pre-loading with these drinks at home and then continuing to drink them in a bar, pub or nightclub. It is possible that students drank one type of alcohol at home (e.g. beer) and continued to drink something different in a bar or nightclub (e.g. spirits) or pre-loaded at home and did not continue drinking in a bar or nightclub, and so the proportion engaging in pre-loading with the different beverage types may be higher than observed in this analysis. As this study aimed to

get information on the context of drinking different types of beverages, it cannot provide figures on the proportion of students who engaged in pre-loading but it adds weight to the dearth of evidence in the UK that undergraduate students engage in pre-loading, are doing so in the first month of university, and provides insight into the type of beverages they drink on these occasions. Previous research into pre-loading has highlighted its association with excessive drinking, intoxication and adverse consequences (138). The majority of students who reported pre-loading in this study drank beer, spirits and alcopops, which, compared to wine, have been associated with riskier drinking practices, negative alcohol-related outcomes and/or illicit substance use (187). Further exploration of the association between context of drinking, type of alcohol consumed and quantity of drinking and/or frequency of binge drinking would provide more depth to this analysis and add weight to the argument of where to direct resources in order to best tackle risky drinking practices in this population.

4.4.1 Strengths and limitations

This is one of the first studies to explore changes in drinking habits as young adults transition from home to university, and across the first academic year. It is also the first study to collect contextual data on where, when and with whom first year undergraduates typically drink. There are, however, some important limitations to take into consideration. This was a single-site study conducted at one university in the UK therefore it cannot be assumed these findings can be generalised elsewhere. Males were also under-represented (although this is common in other studies measuring alcohol intake) as were students of non-white ethnicity from outside the UK.

4.4.1.1 Use of an existing survey to collect drinking behaviour data

This was a pragmatic exploration of drinking habits utilising an existing survey which allowed the author to collect a novel dataset on student drinking behaviour prior to, upon arrival and

across the university year. The initial aim of this was to obtain linked responses over the four time points and explore associations between drinking measures longitudinally, which has not yet been conducted with university students in the UK. In order to do this, a sampling frame which captured all incoming first year undergraduate students to the University was required, which the SU survey provided. Despite this there was a low response rate to the drinking behaviour questions at each survey, particularly when compared to previous research measuring student alcohol consumption, which have achieved response rates between 51 – 91%. These, however, took a more direct approach to recruitment (and therefore based their response rates on a targeted sample) by either providing students with a paper-based questionnaire in lecture time (92, 151, 185, 188) or in a the health centre waiting room (189), or drew the sample from those who had already participated in a sister study (190). The single study which also relied upon students to volunteer had a similar response rate of 16% (based on the registered student population) (184). Non-response bias, whereby the answers provided by participants may systematically differ to the potential answers of non-responders, is well recognised as a limitation of surveys which measure drinking (191). Using a continuum of resistance model, which assumes that non-responders are similar to those who are most difficult to recruit to surveys, Boniface et al. (192) found participants of the Health Survey for England requiring more than 7 attempts to contact had different socio-demographic characteristics and drinking patterns to participants who took less attempts to contact. Notably, they had higher levels of binge drinking and weekly alcohol harm, measures associated with higher risk of acute and chronic harm. This suggests that the low response rate obtained in the current survey may have resulted in an underestimation of the quantity and frequency of drinking among first year students.

Using a repeated measures design in this study was considered to be advantageous over a cross-sectional design as the repeated measurement of drinking variables could provide the author with a more definitive understanding of within-person changes in drinking across the study timeframe (193). The low response rate to the drinking behaviour questions and high loss of follow-up across the survey time points, however, resulted in a small sample size for linked data, restricting the scope of the longitudinal analysis to examining the association between drinking at SUS1 (prior to joining university) and SUS2 (first month of university) only, with just 180 participants. In this analysis, the high odds ratio and wide confidence intervals should therefore be interpreted with caution as the association between binge drinking prior to university and binge drinking upon arrival to university may be overestimated, or equally, underestimated. Future studies that look to explore this timeframe may consider using multiple settings rather than a single university to boost sample sizes, although this is a much more resource intensive operation. Studies exploring alcohol consumption among university students that have utilised this approach in cross-sectional studies (single time-point) have gained sample sizes of 770 (targeting only students on sports-related courses) (93), 2,529 (188) and 3,706 (151).

The online survey, for which the response rate was lower and diminishing at the second, third and fourth time points, was sent to all prospective participants via an e-newsletter from the SU and was primarily aimed at and marketed as a survey for students to share their views of the SU. It is possible that upon arrival to university, students became less interested in engaging with the SU in this way and subsequently fewer responded to their surveys or they simply missed or ignored it. Future work may consider a more direct approach to collecting follow up data, such as collecting participants' contact details at the first time-point and contacting them directly (in addition to the SU email) to complete the subsequent

surveys in an effort to boost linked response rates. This could include following up or replacing the e-newsletter with a mobile alert or more personalised e-mail, although these options would require approval from participants at the first time-point. It is possible that identifiable information, collected by the SU but not used for this study, may have discouraged potential respondents from completing the surveys. Alternatively, the use of smartphone applications where participants can record their intake quickly and in-situ or retrospectively (194) (discussed below in ways to improve the reliability of self-reported alcohol consumption) present an opportunity to boost response rates to longitudinal surveys by sending automatic prompts to existing participants to complete subsequent surveys. The use of this novel data collection approach has not been explored in such a context although apps are often used as a health promotion tool where alcohol consumption can be monitored (195), suggesting their potential acceptability to participants. Finally, providing additional incentives for taking part in more than one survey (such as a bonus for completing all four) could also boost response rates in longitudinal surveys.

Had an appropriately sized longitudinal data been obtained, further investigations would have included exploring the relationship between students' alcohol consumption in the first month of university and their subsequent drinking at the third and fourth time-points (later in the academic year). Previous studies among students in New Zealand found that after controlling for pre-university drinking behaviour, those who drink more during the first week of term have significantly higher rates of drinking later in the academic year (113). The role of freshers' week has not yet been explored in a UK cohort and the findings from New Zealand suggest it may play an important part in the development of students' drinking behaviour. Going a step further, investigations may also wish to develop a more detailed trajectory of student drinking patterns across the transition to university. Understanding

development patterns of drinking across the transition to adulthood is important for providing insight into the extent of risky drinking practices and predictors of such practices, which can have implications for prevention efforts (102). This would require the use of analysis techniques that can identify unique patterns of alcohol use over time, such as repeated measures latent class analysis. This has been used previously to model longitudinal changes in alcohol consumption among adolescents into adulthood (196, 197), as well as other health behaviours such as smoking status among adults (198), which suits it to exploring longitudinal trajectories of student drinking behaviour. Results from other studies using this technique have identified groups of low-to-moderate drinkers, persistent heavy drinkers and groups with varying patterns of alcohol use over time. In a US study (197) exploring alcohol use from ages 18 to 25/26 years found that individuals who delayed alcohol use until after school were unlikely to initiate in high-intensity drinking (drinking more than 10 drinks on a single occasion). Those who did engage in high-intensity drinking as a young adult typically continued to do so throughout their mid-twenties. Further, an individual's ethnicity, socioeconomic or college plans did not affect the risk of being a high-intensity drinker. These findings led them to recommend targeted prevention efforts across the transition to adulthood for individuals at risk of maintaining high-intensity drinking occasions. Research on heterogeneity in drinking patterns among young people transitioning and moving through university in the UK has not yet been undertaken. Understanding trajectories of drinking across the timeframe used in the present study could be a useful first insight into this, although ideally would be undertaken with longitudinal data spanning a wider timeframe than that used in this study, such as the final two years of school and several years past university. This would provide a more detailed insight into trajectories of drinking which could be translated into better prevention efforts.

The existing demographic questions within the survey also had predefined answer categories that were set by the SU, which restricted exploration of drinking measures by particular characteristics. For example, this was perhaps of most relevance to age as the majority of first year undergraduates came under the 18-21 category. This precluded the analysis of drinking behaviour by age of students in their first year, which may or may not impact drinking behaviour (for example, the impact of taking a gap year on drinking behaviour has not been explored).

4.4.1.2 Measuring intake over the 'past month'

The set dates of when the survey was administered precluded the use of 'past week' as a reference period for the drinking behaviour questions (usual practice in many studies) as the author was particularly interested in capturing freshers' week at SUS2, which has been suggested to be associated with higher rates of drinking (113) and drinking to excess (179). The use of past month meant that units of alcohol consumed could not be compared to the UK drinking guidelines and so the proportion of students exceeding the low-risk guidelines could not be calculated. It did, however, mean that a time frame that was more likely to give a more accurate estimate of binge drinking frequency across the year was used. The shorter reference period of 'past week' as used in national level surveys (13) and other student drinking studies (40, 41, 184) has the potential to under or overestimate the true proportion of binge drinkers and miss those who drink infrequently (72, 180). It is possible, however, that the use of a longer timeframe to recall alcohol consumption gave rise to recall error.

It is likely that in asking for students to report their 'average' consumption in the past month they underestimated how much and how often they drank. Although there was a significant increase in the proportion of students' bingeing on a more frequent basis, there was only a

small average increase in median units (6.2 units) drunk in the past month. This could be due to difficulties in participants being able to recall their consumption accurately over a month, or they may have recalled their more recent drinking behaviour. Future work could consider using 'past week' as a measure of drinking in this period (113) and 'past month' later in the academic year, or asking students to recall daily drinking on a weekly basis (115), to capture drinking more accurately. Further suggestions to improve the robustness to capture drinking are presented below.

4.4.1.3 Self-reported intake

The survey was also reliant upon students' self-reported intake. Although this type of data collection is used in most studies measuring alcohol consumption, and is generally accepted as a reliable and valid method for doing so (199, 200), difficulties and inaccuracies in recalling one's alcohol consumption from the previous day and week (more specifically underestimating consumption) have been highlighted before (194). The method used in this study to capture drinking sought to address some limitations of self-reported intake where possible. For example, to capture usual quantity consumed in the past month, students were asked for their typical frequency of drinking, the usual size of drink consumed and the usual number drunk, so that the question was not reliant upon a respondent's understanding of an alcohol unit or size of a standard drink (one alcohol unit equivalent) (176). Asking by drink-type also captured the consumption of alcoholic drinks that are not drunk as regularly, to prevent respondents reporting intake for their most regularly consumed beverage only.

Self-reported intake is also likely to be affected by the drinking context, which was found to vary across the sample and by drink-type. In a study comparing in-vivo reporting of alcohol consumption with memory-dependent accounts, daily retrospective reports resulted in

significant under reporting of alcohol intake particularly when drinking took place outside the home in bars, pubs and friends' homes, compared to drinking at home or work (194). This was suggested by the authors to be due to higher alcohol consumption in such premises impairing one's memory or lack of environmental cues when attempting to retrospectively recall. With the longer time frame students were asked to report on in the present study, it is possible that this also lead to greater inaccuracy and the findings presented underestimate the true quantity and frequency of student drinking. Additionally, many students reported drinking at home where drinks are not necessarily served in fixed measures as they are in bars or restaurants; pouring more than one standard drink or unit as a usual glass of alcoholic beverage is common (201, 202), and so it is possible that respondents in this study have underreported the amount they usually drink. There is no consensus on how much drinks are typically over-poured by, which has been suggested to vary by drink-type, glass size, and individuals' drinking habits (203). In a sample of 283 adults in the UK who were instructed to pour a typical drink they would consume, the mean number of units poured of wine and spirits was 1.90 (SD 0.80, *n* = 264) and 1.93 (SD 0.78, *n* = 201), respectively (201).

Despite the limitations of the data in capturing student drinking quantity and frequency, they are not unique to this study and the use of consistent survey questions across the four time points have allowed for the assessment of changes in consumption as students transition to university and across the academic year. One possibility to improve the robustness of such self-reported consumption in the future could be to collect this via a smart phone application where individuals report their alcohol consumption in real-time and the context where consumption occurs. Although this method of data collection has not yet been validated for use, it has been shown to be acceptable for use by research participants and to provide more accurate data over other recall methods (even when that recall is undertaken daily) (194). It

has even addressed issues of alcohol-impaired cognitive functioning which may affect the accuracy of information provided during heavy drinking, using a straightforward method of question and response with pictorial representations of drinks making it easier to access and reducing the cognitive load of the participant. As discussed above, this may also be a useful approach to improve response rates as it could include prompts for respondents to complete additional surveys. Alternatively, asking students to recall daily drinking on a weekly basis as described above could be more pragmatic but may not yield high participation rates (115). In taking a pragmatic approach to data collection it was also not possible to utilise approaches which measured daily drinking that may result in more accurate estimates of alcohol consumption (204), although future research could consider these options whilst using a sampling frame that is representative of the student population in order to increase the validity of the findings.

4.5 Conclusions

Many students come to university having engaged in or with an established binge drinking pattern. Frequency and quantity of drinking appear to increase upon arrival, when a higher proportion of students engage in binge drinking and on a more frequent basis. This suggests that the time before university is important in establishing drinking patterns but that the university environment may be reinforcing and developing this behaviour. Qualitative work presented in the next two chapters, firstly with first year undergraduates and then with staff at the University, further explores their perceptions of students' drinking behaviour during the transition to university and across the first year and how any areas of concern could be addressed.

5 Exploring first year undergraduate students' experiences with alcohol prior to and across the first academic year

5.1 Introduction

Quantitative methods can give answers to 'what' questions, but leave researchers in relative darkness about 'how' and 'why'. As presented in the previous chapter, although many students reported that they engaged in binge drinking prior to joining university, higher proportions of students did so more frequently upon arrival to university. No studies have yet considered students' perceptions and experiences with alcohol prior to university and whether these change as they transition from home to university.

Previous studies at English universities have identified a number of factors influencing drinking behaviours and alcohol consumption among students. Some of the common findings are that, at university, socialising is often heavily based around drinking, drinking heavily is perceived to be a normal behaviour and facilitates social interactions, and students often fail to associate their heavy drinking with alcohol misuse and believe that their binge or heavy drinking behaviour will not last past the university period (132, 136, 205). However, it has been suggested by university staff (from academic, accommodation, student services, to higher management) that students come to university with "*already well-established binge drinking patterns*" and the first week of term, freshers' week, serves as an introduction to university drinking culture (1, 206). It is important to qualitatively explore students' experiences and perceptions with alcohol prior to university as well as across the academic year, in order to gain a richer understanding of the student experience and context of student drinking, where the areas of concern may be and ways to address these (207).

Additionally, it has also been highlighted that there are many university students who never or rarely drink alcohol and that they may be excluded from, or feel pressure to participate in, the wide number of social activities that are centred around drinking alcohol (132). Findings presented in the previous chapter indicated that up to a quarter of the students were current or lifelong abstainers. Including abstainers in this narrative will help to guide how best to include their needs when addressing problematic alcohol consumption at university.

The aim of this study was to explore students' views on drinking and how their experiences with alcohol change as they transition to university and across the first academic year, including both student who drink alcohol and those who abstain. The more specific objectives were to explore students': (1) views of drinking alcohol and their drinking behaviour; (2) expectations of socialising at university, and the extent to which alcohol would or would not be a part; (3) social lives before coming to university, during freshers' week and across the first academic year, and the extent to which alcohol was or was not a part of this; and (4) awareness and perceptions of efforts to promote responsible drinking.

5.2 Methods

5.2.1 Study design and participants

This was a longitudinal qualitative study using semi-structured interviews. Qualitative research is particularly appropriate for examining process through its attention to context and particularities within individuals' experiences. The incorporation of a longitudinal element allows for investigation and interpretation of how these change over time in

relation to particular processes or transition points, such as the transition to university (208). Qualitative longitudinal research designs have been used across a range of disciplines from medicine to education, and often in youth transitions, and are useful for understanding the notion of career (not only that which means 'work', but also in terms of drink or drug use, mental health,(209) and so forth). It has been argued that not only can observations over time capture critical moments and processes involved in change (210), but it can also lead to a greater depth and understanding of culture and individuals' experiences (211). Exploring students' experiences with and perceptions of drinking across the year opens up the possibility of exploring influences beyond the initial period of transition and widens the opportunity to unfold narratives of student experience through repeat interviews. This will help to build a richer understanding of the student experience compared to a cross-sectional approach, with the aim of illuminating when and where opportunities exist to address this issue (207).

Potential interviewees were identified through the Students' Union (SU) online survey sent to all first year undergraduate and postgraduate students in August 2016 (as described in **Chapter 4**). At the end of the survey, written information about this study was provided and students were asked to provide their email address if they were happy to be contacted by a researcher with further information (**Appendix 8.9**).

The e-mail addresses of interested students (n=741) along with their drinking status (as determined by the following question asked in the first SU survey: Have you ever drunk alcohol?) were provided to the researcher by the SU once the online survey had closed in mid-September 2016. The two groups were emailed with further information about the study (including the participant information sheet, **Appendix 8.10**) by author A.F. where they

were asked to confirm that they were a first year undergraduate student, their current drinking status (current drinker or current abstainer) and that they wished to take part in a series of individual interviews. Students were informed that participants would be selected at random if more volunteered than were required.

Of the 741 students e-mailed with further details, 291 responded (247 current drinkers, 44 current abstainers) and were included within the sampling frame. A maximum variation sampling technique, whereby cases are selected based upon defined characteristics (3), was then adopted to select the cases. This technique is used in qualitative research where sub-groups that exist within a sample may affect the experience or view of a particular social phenomenon. It is therefore used *"to document unique or diverse variations that have emerged in adapting to different conditions"* and can aid in identifying and expanding on the range of variation or difference within a sample (212). For example, in a national evaluation of children's public health services, mental health programmes were purposively sampled to include a range of rural and urban areas across different regions of England to capture the maximum variation in location and represent the diversity of activity that existed within these services (213). In this study, students were purposively selected on the basis of their drinking status and gender, in order to capture the maximum variation of views and experiences with drinking that could potentially exist within the sample. As highlighted in Chapter 2, the experiences of abstainers may play out differently to drinkers at university and so selecting participants based upon their drinking status was important to be able to explore this and address the aim of the study. It has been suggested that gender differences may contribute to diverging drinking trajectories in late adolescence (214). For example, socialisation into traditional gender roles may result in differential attitudes and expectations regarding drinking and drunkenness. It was therefore deemed important to separate

drinkers and abstainers by gender in order to explore any differences in how they view and experience drinking in the transition to university. Although abstainers represent a smaller proportion of the student population, an equal number of drinkers and abstainers were selected (n=16 in each group) in order to conduct an in-depth exploration into the experiences of both groups. An equal number of males and females (n=8) were also selected within each group. Using this set criterion, participants were randomly selected within these groups using a random number generator and invited to take part in the study. These numbers were considered a suitable number in line with general guidance for a purposive sampling technique in a generic qualitative study (215).

5.2.2 Interview process

Semi-structured interviews were used to allow the researcher to delve deeply into the social and personal matters of each participant and to collect rich and in-depth information about their experiences (216). This data collection method was also selected as it allows the researcher to follow individual interviewees' interests and knowledge whilst exploring views of all interviewees comprehensively and systematically (217) with the use of set questions, prompts and/or probes. This ensured essential topics were covered and ensured continuity between each individual interviewee as well as between the interview time points. Semi-structured interviews also work in harmony with the iterative nature of the qualitative and longitudinal qualitative research process, in which data collection coincides with data analysis, or takes place in between data collection points (in the case of the latter (210, 218)) allowing the researcher to alter questions as they learn more about the participants (216) and follow up important lines of inquiry.

The first interview was arranged to take place in the fortnight following freshers' week. This period was selected to give students enough time to settle into university and experience freshers' week, but still be in a position to recall their experiences with drinking before and during this time. Any non-responders were sent a reminder one week after the invitation to interview; if they did not reply and it was still within the above timeframe, they were replaced with another participant of the same gender and drinking status. Out of the 32 participants contacted, one participant did not show up to interview and no further replacements were made owing to the time that had passed since freshers' week; one international student did not complete their first interview as they did not speak English sufficiently well to understand the questions and were therefore removed from the study. At the first time point face-to-face interviews were conducted with all but one student who could not meet in person at a mutually convenient time and therefore this interview was conducted by telephone. Interviews were conducted by author A.F. at a time and location convenient to the participants; face-to-face interviews took place in a private room at the University and telephone interviews were conducted from a private room at the City Hospital, Nottingham. Before the start of each interview, it was explained to participants that their responses would remain confidential, they would not be identified in any way, and that they had the right to withdraw at any time. Written informed consent was obtained at the start of the first interviews and all participants were offered a £15 shopping voucher for each interview they took part in.

Following the first interview, participants were invited via email to take part in two follow-up interviews in December 2016 and June 2017. A reminder email was sent one week after invitation to interview if a response had not been received. Any non-responders were not replaced as the intention was to follow up with the same group of students. As it was felt a

good relationship was built with all participants in their first interviews, they were all offered the option of having a telephone interview at the second and third time points.

5.2.3 Development and nature of interview guides

Separate interview guides were developed for the three different time points and by drinking status (**Appendices 8.11-8.16**). Pilot interviews with three undergraduate students in their third year of study, who were recruited through the academic department of the author, were undertaken in September 2016 in order to test and refine the interview guides. The researcher deemed that the questions were acceptable to the participants, who were able and content to answer them all, and elicited appropriate responses. Small changes were made in the addition of prompts to remind the interviewer to: encourage respondents to describe non-drinking focused social activities as well as drinking-focused activities; encourage respondents to describe how much they drank when they did and how this differed across social activities; and probe into the importance of drinking when socialising.

The first round of interviews (**Appendices 8.11 and 8.12**) covered: students' views on alcohol and the UK drinking culture; their first experiences with alcohol; their social lives before coming to university and during freshers' week, and how alcohol was or was not a part of this; their expectations of the social environment and drinking before coming to university and their perceptions of these during freshers' week; their drinking behaviour before university and during freshers' week (current drinkers only); and their awareness and perceptions of health promotion campaigns relating to alcohol during freshers' week.

After the first interview a summary for each student was written so that the second interview could be tailored to their drinking behaviour and experiences, and similarly after the second interview to tailor the third. The second and third rounds (**Appendices 8.13-8.16**) considered: the nature of students' social lives in the time since the previous interview; their perception of the university social environment and the extent to which alcohol was a part of this; their drinking behaviour and opinion on it (current drinkers only); consequences experienced as a result of their or others' alcohol consumption; and views on university health promotion campaigns relating to alcohol.

First round interviews lasted 50 minutes on average (range 27 to 75 minutes), second round interviews lasted 37 minutes on average (range 19 to 55 minutes) and third round interviews lasted 29 minutes on average (range 13 to 44 minutes). All interviews were digitally audio-recorded.

5.2.4 Analysis

5.2.4.1 The Framework Approach

The Framework Approach (219), a method of qualitative data analysis and management which sits within the broad family of thematic analysis techniques, was adopted for this study. This approach involves the transcription of, familiarisation with and thematic analysis of interview data to result in an analytical framework of themes and sub-themes. These are then summarised into charts according to each participant. A more detailed description of the stages that were followed in this study are provided **below**.

When selecting an analytical technique for longitudinal qualitative research, it is important to take into account a number of factors. Firstly, the large and complex datasets generated require a technique that aids data management. Secondly, the iterative nature of the qualitative research process in which initial analysis of interviews should take place between the time points. Thirdly, the use of approaches which allow analysis within and between cases, to compare across the data set and across the time points (209, 210, 220), building cross-cutting themes but also provide a sense of individual experience (207). Calman et al. (210) also recommended that researchers should consider whether analysing by subgroup is appropriate; it was posited that there may be differences in experiences between drinkers and abstainers, and males and females, and so special attention was paid to this during analysis during the charting stage. The Framework Approach was therefore selected as the process of charting is flexible enough to allow the researcher to explore elements of time, change and process, within and between cases and/or subgroups, and aids with the systematic management and reduction of the large volume of data generated (219, 221).

The Framework Approach also results in the process of data analysis becoming even more transparent than traditional thematic analysis, as it creates an audit trail illustrating the link between each stage of analysis (221, 222) enhancing the credibility of the findings. The interconnected stages then enable researchers to easily move back and forth across a dataset until a coherent account is generated. The process of charting aids the researcher to compare and contrast findings within and between cases and/or subgroups, facilitating the constant comparative techniques that are essential to qualitative data analysis (219).

5.2.4.2 Analysis process

An external specialist transcription company, Transcribe It®, transcribed the digital audio recordings generated from the student interviews clean verbatim. The transcripts were then checked for accuracy and any personal identifiers were removed. Prior to transcription, each student was assigned a unique code that identified their drinking status (drinker is denoted with an A, abstainer is denoted with a B), gender and participant number.

Preliminary analysis of the data was conducted after each round of interviews in order to identify important issues that could be followed up with participants (210). In a first step to aid familiarisation with the data, transcripts from the first interviews of two current drinkers and two current abstainers were read several times by author A.F. and supervisor M.B. and annotated, with initial codes, themes and sub-themes being identified. Themes and sub-themes were discussed between the researchers to reach consensus on an initial analytical framework. As the codes identified from both the drinker and abstainer interviews were similar (with the exceptions of sub-themes on abstainers' decision to not drink and drinkers' drinking behaviour), data were analysed together. This framework was applied and refined following analysis of the remaining transcripts.

Data from the second and third round of interviews were then analysed to assess whether the coding framework from the first round of interviews could be applied. It was found that data from the two follow-up interviews represented and built upon the existing themes. These were therefore indexed using the same coding framework and charted according to each theme to facilitate synthesis and interpretation after the final time point. This aided the researcher in exploring changes over time in students' perceptions of and experiences with alcohol.

The results are presented combining the three datasets; similarities and differences according to each time point, and within and between drinkers and abstainers are identified and highlighted where appropriate. The data presented reflects the views of both drinkers (denoted with an A) and abstainers (denoted with a B); although where sub-themes are specific to just one of these groupings, this is highlighted in the text. To further illustrate the change in experience with drinking within individuals over the first academic year, two case studies of one drinker and one abstainer have been embedded into the findings. A narrative for these individuals is presented at the end of each theme. Extracts from the transcripts, indicating from which time point and participant they came, are included to illustrate the findings. For example, 'Female, A12 (T2)' indicates a female drinker's quote from the second interview time point.

5.2.5 Ethical approval and considerations

This study was granted ethical approval by the Faculty of Medicine & Health Sciences Research Ethics Committee at the University of Nottingham (reference number: B14062016 SoM EPD). Prior to ethical approval, permission to invite students to take part in the interviews at the end of the online survey was sought and granted by the SU (**Appendix 8.5**). All personal data obtained by the researcher (such as names and telephone numbers) were kept on a password-protected computer and were only accessible to the researcher. The use of the unique ID code allowed participants to be linked across time points whilst remaining anonymous to anyone other than the researcher, and all personal data linked to their codes were kept on a database separate from other study documentation.

5.3 Results

In total, 30 interviews were conducted at the first time point (29 face-to-face, 1 telephone), 27 at the second time point (6 face-to-face, 21 telephone), and 21 at the third time point (1 face-to-face, 20 telephone). Tables 4.1 and 4.2 detail the characteristics of the participants, and the number of interviews they each completed. The majority of participants were from the UK, two were International and one was from the European Union. Of those lost to follow-up, one left the university and the remaining did not respond to the invitations to interview.

Table 5.1 Participant characteristics and interviews completed (drinkers)

Student	Drinking status	Gender	Fee status	Number of interviews completed		
				1	2	3
A1	Drinker	Male	UK	✓	✓	✓
A2	Drinker	Female	UK	✓	✓	✓
A3	Drinker	Male	UK	✓	✓	
A4	Drinker	Male	UK	✓		
A5	Drinker	Female	UK	✓	✓	✓
A6	Drinker	Female	International	✓	✓	✓
A7	Drinker	Male	UK	✓	✓	✓
A8	Drinker	Female	UK	✓	✓	✓
A9	Drinker	Male	UK	✓	✓	
A10	Drinker	Female	UK	✓	✓	✓
A11	Drinker	Female	UK	✓	✓	✓
A12	Drinker	Female	UK	✓	✓	✓
A13	Drinker	Female	UK	✓	✓	✓
A14	Drinker	Male	UK	✓	✓	✓
A15	Drinker	Male	UK	✓	✓	

Table 5.2 Participant characteristics and interviews completed (abstainers)

Student	Drinking status	Gender	Fee status	Number of interviews completed		
				1	2	3
B1	Non-drinker	Male	UK	✓	✓	✓
B2	Non-drinker	Female	UK	✓	✓	✓
B3	Non-drinker	Male	UK	✓	✓	✓
B4	Non-drinker	Female	UK	✓	✓	✓
B5	Non-drinker	Female	UK	✓	✓	✓
B6	Non-drinker	Female	UK	✓	✓	
B7	Non-drinker	Male	UK	✓	✓	✓
B8	Non-drinker	Male	UK	✓		
B9	Non-drinker	Male	UK	✓	✓	✓
B10	Non-drinker	Male	UK	✓	✓	✓
B11	Non-drinker	Female	European Union (EU)	✓	✓	✓
B12	Non-drinker	Male	UK	✓		
B13	Non-drinker	Female	UK	✓	✓	✓
B14	Non-drinker	Female	UK	✓	✓	
B15	Non-drinker	Female	International	✓	✓	

Four main themes were identified and interpreted within the data: 1) perceptions of drinking and encouraging responsible drinking; 2) drinking behaviour; 3) drinking culture; and 4) social environment. The themes and their corresponding sub-themes are listed in Table 5.3.

Table 5.3 Themes and corresponding sub-themes – student interviews

Themes	**Sub-themes**
1. Perceptions of drinking and encouraging responsible drinking	*a. Opinion of drinking* *b. Understanding of harm* *c. Promoting responsible drinking*
2. The university drinking culture	*a. Perceptions of the drinking culture in the UK* *b. The drinking culture before university and how students engaged with it* *c. Expectations of the university drinking culture* *d. The university drinking culture and how students engaged with it* *e. Importance of drinking in forming and maintaining friendships* *f. Peer pressure, influence and social expectations*
3. Students' drinking behaviour	*g. Abstainers' decision to not drink* *h. First drinking experiences* *i. Drinking pattern & drinking intentions* *j. Other students' drinking behaviour* *k. Drinking consequences*
4. Nature and perceptions of the social opportunities at university	*l. Social events and opportunities during freshers' week* *m. Social events and opportunities during term time* *i. Socialising within friendship groups* *ii. Society and sport clubs socialising* *iii. JCR events* *iv. Range of social opportunities across the university* *n. How social opportunities at university were advertised and promoted*

5.3.1 Perceptions of drinking and encouraging responsible drinking

The first theme of four covers students' opinions of drinking and binge drinking, their understanding of the harms of drinking and their views on the efforts they had seen to promote responsible drinking at university and what should be taken into consideration when attempting to do so.

5.3.1.1 Opinion of drinking

At the first interview, most of the students that drank felt it was an acceptable behaviour when done in moderation. Drinking in moderation was perceived by some as having a drink to enjoy it and not get drunk whereas for others it was getting drunk occasionally. Some felt that drinking became a problem when getting drunk several times a week or if it led to being sick or being unable to recall the night itself. In contrast, others only considered drinking to be a problem if it caused visible harm to the individual or other people, or it was relied on to have fun.

> *I'm sure a lot of people kinda do it at parties and things like that and they start to get it into their head that if they don't drink, they can't have a good time and like I, I view that as a pretty negative thing.* Male, A14 (T1)

Students' main concern when drinking was staying in control to avoid embarrassing themselves, causing disturbances, accidents or being a victim of crime. Most abstainers did not have a problem with others choosing to drink but many said they disagreed with getting drunk due to the health and social consequences. Some also said they felt being around people who were drunk was "*slightly unnerving*" (Male, B12 (T1)). Some of the female drinkers viewed drinking more negatively than males, not liking the effect it had on other people's behaviour who may act "*out of control*" (Female, A13 (T1)) or inappropriately, "*Especially as a girl I feel like it's worse, but men can come up to you and just like touch you and it's uncomfortable and it's not fair ... And I think people can be aggressive and swear*"

(Female, A10 (T1)) as well as the general expectation and pressure to drink that they and others had experienced.

Across the year, there did not appear to be any changes in students' view of their drinking behaviour regardless of how little or much it changed. Those who reported binge drinking said they were fine with it because they did not drink every day, perceived that they could stop before getting out of control and were able to avoid any negative consequences such as passing out, losing their possessions or not being able to get home safely.

> *There have been a couple of occasions recently where I look on my shelf the morning after and realise I've drunk almost a whole bottle of vodka, and I do kind of slightly worry that maybe that's going a bit over the top … but other than that I'm generally okay with my drinking. Like I don't drink every night, I don't drink on my own, I don't consider myself an alcoholic. I mean I like a drink but like I don't drink constantly. I'd like to think I know when to stop.* A7, Male (T3)

There was one exception to this, an international student, who had come to university having drunk very little prior to university and with a negative view of drinking. As she started to socialise with her British flatmates during freshers' week, however, her view began to change and she saw it as a more acceptable behaviour. This is illustrated in Figure 5.1 as part of the case study.

5.3.1.2 Understanding of harm

All students were aware that there were health consequences associated with drinking alcohol, although not all were able to articulate these at all or in much detail, "*people who like going out every single night and getting absolutely smashed then I feel like it's too much and it can't be good for you*" Male, A14 (T1). A few that were able referred to liver damage,

cancer, higher calorie intake, accidental death and injury, and addiction. Most too were unaware of the UK drinking guidelines and it was generally perceived that harms to health were caused when drinking in greater quantities and frequencies than they did themselves.

> *I don't know what the guidelines are for how much you should drink per week or per day or whatever.* Male, A7 (T2)

None of the students said that they took the drinking guidelines or health risks into consideration when drinking, "*I've never really thought about it like going out and then thought, 'ooh that's the recommended limit, I must make sure I don't go over that"* (Male, A1 (T2)). Among the students whose self-described alcohol consumption at the first interview could be classed as low-risk drinking, none felt knowing about the guidelines impacted upon their drinking behaviour.

> *I- I don't know whether it influenced me then because by that time I knew like my limit as such so I knew from the like percentage and things, like "Oh I shouldn't drink too many, I'll just have like one or two."* Female, A13 (T1).

A few drinkers described drinking that caused harm as binge drinking but did not consider this reflected their own drinking behaviour. Others said they had read about binge drinking and realised that the number of drinks that was tantamount to a binge was a lot lower than previously thought, *"I had this preconception that binge drinking was kind of this where you get absolutely sloshed. But it's actually like a drink every hour or five drinks over consecutive hours."* Male, A4 (T1).

5.3.1.3 Promoting responsible drinking

At each time point students were asked about their awareness of any university-based campaigns or advice relating to responsible drinking. Most students did not recall seeing any information about alcohol awareness at any point in the year. Among the few who did, these

were mostly seen during the freshers' week period. This included a leaflet and/or a unit calculator when registering for the University GP practice in freshers' week to inform them on how much they were drinking in relation to the guidelines, anti-spiking caps to put on bottled drinks when in a bar or nightclub, and a business card from a student-led alcohol and sexual awareness group (handed out at a freshers' week nightclub event). When visiting the social media accounts advertised on the business card, searching for more information, one student found they were not kept up to date and so disengaged with the scheme, "*their last post was like last ... two weeks ago, so I don't see the point of liking it when they're not active"* Female, A6 (T1). During the first semester, some students saw information on getting home safely after a night out in their hall of residence but none could recall these in any detail. None reported seeing any advice or campaigns during the second semester.

There were mixed reactions as to how well received alcohol awareness information would be. Some students felt it would be well received but stressed that only hard-hitting health information would have any impact, "*I think more what hits home to me, especially about alcohol is what it does to your body on the inside, the stuff you can't see*" (Female, A10 (T1)). Raising awareness around the drinking guidelines and relieving the pressure to drink were raised as potentially useful topics, or highlighting the dangers when drinking, such as how to stay safe when drinking or help friends who are drunk. Others felt the advice would be ignored and may even encourage students to be rebellious and drink more. It was mostly considered to be ineffective, however, because many students perceived that drinking is an important part of the university experience and the start of university is a time where many students learn their limits.

> *I think in life you know you have to make mistakes to realise you know what you're doing might be wrong, and if uni kind of tries to encourage you to be responsible*

maybe it's more likely you'll rebel and kind of just get, you know, really drunk just to prove them wrong. Male, A7 (T3)

Others felt university was too late a time to intervene as they perceived that most students were already drinking on a regular basis and that they have a personal responsibility to manage their own alcohol intake because they are adults. Many also referred to not seeing or experiencing any major consequences as a result of drinking and so did not consider intervention to be necessary.

Students' felt that any campaigns relating to alcohol, regardless of their content, should come from the University, for example, hall welfare officers or the health centre, or the SU who were generally considered to have the biggest responsibility for student welfare. Suggested formats included leaflets, information in the welcome pack provided during freshers' week, stands in the SU building or on social media.

Probably places where they see it accidentally, so a … Facebook, scrolling down there's, I don't know, a video of these risks or just cases where this student drank too much, look what happened. Things like that. Male, B10 (T2)

A couple of students suggested any messages around responsible drinking may be best received if they came from other students or were pitched carefully:

I think the narrative of, with students, of people being like, "Oh, be sensible, don't drink too much," that just makes it sound like they don't want, you know, they don't want you to, you know, 'have fun', but I think if they take a more of a line of, you know, "We're not saying don't have fun, we're saying you'll probably actually have more fun and feel better about yourself and be safer, you know, if you do drink slightly less," and kind of undermining that idea that it's just really cool and really impressive. Female, A12 (T3)

Figure 5.1 Case studies for perceptions of drinking and encouraging responsible drinking theme

In this theme the case studies focus on how the selected students' opinions of drinking did or did not change across the first year. The sub-themes 'understanding of harm' and 'promoting responsible drinking' relate to perceptions that emerged ad-hoc throughout the year as opposed to representing important changes in experience across the year, and so have not been included below for this reason.

Drinker (A6)

Before coming to university, A6 had a negative opinion of drinking which had been shaped by their experience of seeing friends drinking too heavily, and not liking the negative behaviour these friends exhibited towards each other:

> *I wasn't really a huge fan of drinking. I used to dislike it 'cos I used to see what it did to people… My friends back at home were quite heavy drinkers so I didn't like it 'cos they used to get really drunk and we used to, err, used to do stupid stuff, like they would draw on each other when they pass out, or they would just do crazy stuff. So I didn't like it.*

Upon arrival to university, A6 describe how their opinion of drinking had changed. During freshers' week they were encouraged to come to nightclub events by new flatmates during freshers' week. Having had positive experiences drinking and getting drunk with them, and seeing how they were able to stay in control when drinking or support each other if a friend was drunk, they became more tolerant of drinking alcohol:

> *Before it [university] I didn't used to drink and I'd never gotten drunk before. So coming here and being drunk has taught me like many different things, like how I shouldn't judge people when they're getting drunk. After coming to uni I've just realised that it's not that much of a big deal. People do get drunk and we just look after one another and it's not that big of a problem.*

At the end of semester two, A6 illustrated their newfound acceptance and positive opinion of drinking when asked what advice they would give to new students who may feel nervous about the university drinking culture:

> *I would say the same things my friends said to me, just give it a try, go one time, if you don't like it, we won't force you to do it but if you like it then do it, you can come with us and we'll always be there for you, that was the same piece of advice I got the first day I got here.*

Abstainer (B2)

Although B2's reasons for not drinking were primarily due to her religious beliefs (see Figure 5.3), she also described how she believed drinking was unhealthy for the body and for social reasons. She felt that drinking alcohol shouldn't be required to have fun, and found it confusing as to why people said they relied on alcohol to have fun or to feel confident. This tied in with her beliefs that in the UK people typically drink to excess, rather than use it as part of a relaxed social atmosphere.

> *I think people drink quite excessively, especially in the UK. Whereas like say in France and Germany or like European countries it's more of you go, but you can have like a drink, but it's not to get drunk. Where it's more of just like you socialise with the drink in your hand. But whereas here it's like, "I'm going out to get drunk tonight." And I think people just take it a bit far.*

This opinion remained across the academic year, and she recognised that drinking to get drunk was not just a university-based issue but a societal one, *"I wouldn't just say its university, I'd say not just this university, I'd say it's more of a widespread thing. I think it's 'cause people, maybe the way they're brought up is to see it as not just a socialising thing but something to do, just to purely drink."*

5.3.2 The university drinking culture

This is the second theme of four, which covers students' perceptions of the drinking culture in the UK, how they engaged with it prior to joining university, their expectations of what the drinking culture would be like at university and the extent to which they engaged with it. It also covers the importance of drinking in forming and maintaining friendships, and the extent to which students experienced peer pressure to engage in heavy drinking.

5.3.2.1 Perceptions of the drinking culture in the UK

All students felt that drinking was prominent in British culture, and in particular for young adults binge drinking was seen as normal and expected behaviour, which partly contributed to a "*pressure to drink more"* Female, A5 (T1). Some students felt that this pattern of drinking was more common at university, compared to those that moved into full-time employment after school and older adults. They generally felt that their parents tended to "*have a glass of wine with dinner*" (Female, A2 (T1)) although some older adults did occasionally or often get drunk; "*older people are quite into going to the pub and you see loads of old men drinking loads*" (Female, A13 (T1)). Students who were not from the UK described the drinking culture as being more intense than their home countries, as it was often the focus of socialising.

> *I think it's a lot more <laughs>. People drink a lot more. They do pre's and stuff that don't exist in Spain, like we go to the club and that's it. Here they drink a lot before and then when they go to the club they continue drinking.* Female, B11 (T1)

5.3.2.2 The drinking culture before university and how students engaged with it

Many students began drinking when socialising at house parties before they turned 18, although this was considered to be infrequent (once a month or less), "*there was the odd house party, but at that point we weren't really drinking that much 'cos we didn't really know*

that much about it" Male, A1 (T1). Once they were able to go to bars, pubs and nightclubs many of the students drank when socialising more often. Heavier drinking would take place for most when going to a nightclub or house party, compared to going to the pub, which for some would happen in the form of pre-loading, "*you need it to last so there was more drinking … yeah you used to get drunk [at home] and then have a few in the club"* (Female, A2 (T1)). Not all drinkers reported pre-loading prior to university, those who discussed pre-loading reported that they did not engage in it or use it to get drunk before university because they perceived that drinking before going to a bar was "*a little pointless*" (Male, A4 (T1)), it wasn't the usual place to get drunk or they didn't drink in large quantities anyway. For the other students who drank, they only did so on special occasions, "*usually only people's birthday parties*" Female, A6 (T1), which did not involve getting drunk.

Many of the abstainers reported they rarely socialised around people who drank before coming to university, with most of their friends being light or non-drinkers, or it not being a normal focus of celebrations in their culture.

> *If there was a party being thrown by a friend of mine or someone I know it wouldn't really be centred around drinking … It would be a celebratory party maybe because of graduation, for example, and there would also be different elements to the party so there would be, you know, dancing, music and then there'd be food and then you'd get to see some friends maybe you haven't seen in a while so drinking was only- wasn't that big a part of most of the events I'd attend.* Female, B15 (T1)

5.3.2.3 Expectations of the university drinking culture

The majority of the students, both drinkers and abstainers, said that they expected drinking to be a big part of university life. In particular, the students who drank came into freshers' week with an expectation that it would be a "*whole week of just people drinking … going out*

to different [night] clubs" (Female, A5 (T1)), and that they and others would be drinking more than they had ever before during that week. These expectations came from older friends and siblings who told them about their experience of freshers' week as well as television, film and social media.

> *It just, you know, stories, what people tell you, what you see on media reports and that sort of thing. When people come back and they say, "Freshers' Week is going to be the best week of your life" or something, you know, there's a heavy drinking culture at universities and, so you just sort of expect it before you get there.* Male, A3 (T1)

Some had also seen event information on the SU website or had received it from the SU through email prior to university. A few also remembered seeing "*student nights out, saying they were freshers' nights out*" at "*different clubs*" *(*Female, A13 (T1)) being heavily promoted on an unofficial freshers' page on the social media website, Facebook; "*They seemed a bit more intense than the ones that we were like given, they were just like "oh crazy parties", like that and a bit intimidating!"* (ibid).

Some drinkers felt hesitant about the fact that drinking was a large focus of university culture, "*I was really afraid of it*" (Female, A6 (T1)), and hoped that there would be events that did not focus solely on drinking, "*like sports taster sessions and things like that*" (Female, A8 (T1)). Others were excited to immerse themselves in it. Similarly, some of the abstainers were apprehensive about the focus of drinking and were especially concerned that during freshers' week they would be alone in not drinking or that they would experience a lot of pressure to drink. There were a few, however, who were happy to socialise among others who were drinking as they already did so at home.

> *Anxious, just like I didn't want to be like the odd one out.* Female, B11 (T1)

I thought I'd fit in quite well to be honest, I'm used to kind of that culture so I, yeah and no, I didn't have any kind of like, I wasn't worried about not kind of being able to get involved. Male, B7 (T1)

5.3.2.4 The university drinking culture and how students engaged with it

During freshers' week alcohol featured more prominently and frequently than it did at home for all the drinkers, "*I think there was one night where we didn't drink … the rest of them did*." (Male, A9 (T1)). Many of the abstainers felt alcohol featured heavily for most students in freshers' week, "*they seem to drink a lot*" (Female, B3 (T1)). Some said they only drank in small quantities because they were feeling nervous but many drank a lot, even from the point of moving into their accommodation, because their flatmates were.

On the first day that we came I remember that we all started drinking like, I arrived by about 11, I remember by about three o'clock people started drinking. Male, A15

During freshers' week, students most commonly reported drinking in their flats, taking part in pre-loading sessions with their new housemates where they would get drunk before going out to a club. This included those who had not engaged in this behaviour before coming to university. Several also described how they would "*play drinking games"* (Female, A2 (T1)) with housemates in their accommodation as part of pre-loading or as an evening's activity. A few of the drinking students described that housemates drank every night or way beyond their limits in an attempt to impress others, "*two of my flatmates went out seven days in a row and I don't know necessarily think they were drunk every night but they were drinking every night … it was a goal*" (Female, A12 (T1)). Some lived up to their own expectations of drinking on a near daily-basis during freshers' week as they thought it was acceptable and fun, although others found the emphasis on drinking overwhelming or found that the

combination of drinking and nightclubbing lost its appeal and took the choice to avoid it on several nights. In doing this they were reassured to find there were others who felt the same.

> *I'm kind of pleasantly surprised with the amount of people that aren't under the pretence of just thinking that every night is made much more fun by being drunk and that they want to be drunk as many nights as possible… Sunday night, again two flatmates went out, this time to a club night and again I said, "I don't want to go" and all of my other flatmates said, "Neither do I."* Female, A12 (T1)

Several of the abstainers said they felt excluded from, or that they could not socialise with, their new housemate groups because of the emphasis of drinking to get drunk when socialising, "*everyone would be drinking a lot, I just didn't feel like we had the same ideas of what it is to have fun"* (Male, B8 (T1)). Some were able to make friends with other abstainers in their halls of residence, or on their course, "*I was all right since I went with people who didn't drink or didn't drink that much at all so I didn't feel isolated*" (Male, B12 (T1)). One European student found the amount of drinking and number students who were drunk, "*on the floor*" and being sick before leaving the house "*shocking*" (Female, B11 (T1)).

Once freshers' week was over, most students reported that the drinking culture became less intense although many abstainers said there was a continued emphasis on drinking when socialising. Although doing so less frequently, drinking continued to be a feature of students' socialising, featuring to a similar or even greater extent on these nights than it had during freshers' week with a continued emphasis on getting drunk during pre-loading sessions.

> *The gaps between going out clubbing have got bigger and bigger as the term's drawn on which I think was expected and they're kind of only, they're really only the times that I would be drinking.* Male, A1 (T2)

> *It's [alcohol] a big part of the night so we'll pre-drink at one, either theirs or our flat, we usually get drunk enough to go clubbing, to not have to buy too many drinks in the club.* Female, A2 (T2)

Some abstainers reported feeling ostracised from many of the social opportunities available because their peers would often focus on activities which involved drinking or getting drunk, "*I feel like I'm missing out a lot*" Female, B2 (T2). Of the students who joined sport clubs or student societies (run by older students at the university), many reported going on their social events during the term-time which tended to focus on drinking, "*they tend to do a lot of nights out… like bar crawls and general club nights out. It's definitely centralised around drinking"* (Female, A10 (T2)). Drinking was a part of their social events from the beginning of term. One student described the dedication one sport club had to drinking and clubbing every Wednesday "*as though it's like religious worship*" (Female, A8 (T2)).

In the second semester, the emphasis on drinking when socialising became greater for some students as they became more comfortable and confident in their new environment, whereas for others the emphasis on drinking reduced as it was felt to be less important in their friendship groups.

> *At the beginning I wasn't too fussed on alcohol, I'd just drink it 'cos everyone else does. But like now in the second semester we definitely drink a lot more alcohol and we get a lot more drunk. I think again it's to do with comfortability, because I know these people. So there's no, there's less inhibitions I guess.* Male, A7 (T3)

For the majority of students who drank, however, there was no change in the regularity or emphasis on drinking when socialising, "*it was probably pretty similar for me as it was last term*" (Male, A14 (T3)). At the end of each semester and post-exam period, students said they socialised a lot more in a short space of time, so drinking became more regular. Many of the students who drank also said there was a buzz around the last week of the year (after

their final exams), which they expected to be similar to freshers' week in terms of how often and how much they would be drinking, "*everyone keeps hyping up about after exams, 'we're going to go and go and drink loads, we're going to loads of events"* Female, A5 (T3).

5.3.2.5 Importance of drinking in forming and maintaining friendships

In freshers' week, many of the students who drank said that alcohol was an important socialising tool, giving them more confidence to speak to new people, feel less awkward around new flatmates or course friends as it acted as an icebreaker, and helped to form friendships.

> *Getting to know flatmates and stuff, alcohol does help a little bit with that because you can play drinking games, that's what we've been doing. It's been really funny.* Female, A2 (T1)

Among the abstainers, those that joined in with social events focused around drinking mostly enjoyed the experience and found they were a good place to make friends, but several found it difficult to be around students who were getting drunk as it acted as a barrier to getting to know them properly.

> *I like going out to parties, I like socialising, I just like meeting with my friends and other people and meeting new people so, and the fact that drink's there doesn't really affect my decision at all, to be honest.* Male, B7 (T1)

> *They were all quite drunk and then they, they were being really nice, it was fun but then I thought there was a bit of a barrier.* Male, B8 (T1)

Some of the drinkers felt that their drinking when socialising did not exclude abstainers from the experience, and described how students who joined in with drinking games used non-alcoholic drinks, *"They join in with the games but we give them water instead so they don't*

have to drink and then if thing is that you're meant to drink whatever the thing is in the middle, they don't have to. Like it's just totally chilled, it's whatever" (Female, A2 (T1)).

Moving into the first semester, there were mixed feelings about the importance of drinking within friendship groups. Some students said that because they were more "*relaxed around*" their new peers, drinking became less important, "*I don't need to drink to, sort of, have a good time [with them]*" (Female, A8 (T2)). Sober nights or socialising in the daytime without alcohol were felt to be just as fun and important for bonding. Reflecting on their year, however, many students who drank said that "*going out drinking have been some of my funniest memories*" and have been "*important in making sure I've enjoyed first year*" (Female, A5 (T3)), and in bonding further with their friends. Not all were sure whether drinking was the important factor in bonding and that it is more just a fun thing to do.

> *A lot of good stories have come out of going out with friends. I do think, like with everyone going, it probably does make you a little bit closer. So in that respect it's important, but whether the actual drinking part of that is important, I'm not too sure.* Male, A14 (T3).

For some abstainers, it remained important for them to socialise away from alcohol across the year. A few found it challenging to find friendships at first as they did not meet other abstainers in their accommodation or on their course.

> *I'm feeling a bit more like anxious now, because I'm just like, I haven't met proper friends yet. I know it takes time, but I'm not very patient or I'm just kind of like erm, I hope the drinking thing dies down a bit. I don't know if it will in the first year obviously. Erm, but we'll see. Female, B2 (T2)*

A couple of abstainers also reported that they had started to drink at university in small quantities and reported doing it as it was a way to fit in with their peers, "*It's a little bit easier to go along with what they're doing, to join in.*" (Female, B6 (T2)).

5.3.2.6 Peer pressure, influence and social expectations

Many students said that prior to joining university they felt there was a general expectation and "*underlying pressure*" (Female, A12 (T1)) to drink and/or drink heavily when socialising, which was felt during freshers' week. Some described how they were able to ignore this and only drank what they felt comfortable with, however, several students alluded to acting on this pressure or expectation during freshers' week, and drank heavily to keep up with friends. Some felt regretful that they did so.

> *I think so because like with the, erm, seven shots thing, by about the fifth one I was just thinking, 'Oh god I need to like settle it.' But when someone's like overtaking – when someone's overtaking you, you sort of get competitive and just think, 'No I'm going to do …' Like you're going to do it so you sort of push through it.* Male, A15 (T1 – referring to freshers' week)

After freshers' week and across the academic year, many students said they continued to feel an underlying expectation to get drunk and "*be at a similar level of drunkenness*'" (Male, A1 (T2)) to their friends although it was not felt as strongly as during freshers' week. One student highlighted how her friends "*feel pressure and insecure if they don't drink as much as everyone else*" and that "*it takes quite a lot of guts to be able to say no*" (Female, A12 (T3)). Students felt that they did not experience direct pressure to drink, but were encouraged or had seen peer-on-peer coercion to drink more frequently or in higher quantities than they normally would, particularly when pre-loading or playing drinking games. Some said this did result in them drinking more often or in higher quantities, although several maintained that they only acted on it if they wanted to.

> *That's when I get more drunk because they are the ones who constantly go, "Yeah, just finish it, just finish it, we'll get another one or do another sh- [shot], we'll do another round"* Female, A6 (T3)

Abstainers said that throughout the year most peers respected their decision to not drink, although had to often explain themselves if they were offered a drink. One described her experience with a friend:

> *I went to my friend's, she had a dinner out at this restaurant and erm, they were all having like drinks afterwards and she bought me a drink, she was like, "no you have to drink it, you have to drink it" … I mean it was quite kind of like in my face, like "try it, try it."* Female, B13 (T3).

Many students referred to peer-on-peer encouragement to drink heavily from leaders of student-led societies and sports clubs. This began at the first social events, which took place shortly after freshers' week, and continued throughout the year. Some included alcohol-related initiation rituals for first year students, to which the students said they felt obliged to take part in but were happy to go along with. This led to them getting drunk very quickly and even being sick immediately afterwards.

> *You can't really say no to them [sports team] … Two litre cider, you had to just like, drink it in one, everyone threw up on that one [laughs]. So it's whatever they give you, you've got to drink it.* Male, A9 (T2)

> *I was on the [sport] trip … 'cos we were new people to the society they were quite like … you know like initiation drinks and that kind of thing. I think that was probably the most drunk I've been on a night out for a while … All the members of the committee had definitely planned it from the start, and they'd got like loads of random drinks just kind of mixed it into one bucket thing … You just kind of get a big egged on, I guess, yeah.* Female, A10 (T3)

Figure 5.2 Case studies for the university drinking culture theme

Below the case studies continue, considering how students engaged in and perceived the university drinking culture.

Drinker (A6)

They felt that compared to their home country of Malaysia, the drinking culture is bigger in UK as it is more common and normalised, "*it's like a normal thing to drink*". Before university, their first experience of drinking was "*on my 18th birthday*" where they drank "*a Jägerbomb, a shot of absinthe, and a glass of beer throughout the whole night and that was basically it*" but other than than did not engage in the drinking culture where friends got drunk because "*I wasn't really a huge fan of drinking*". They described how they felt concerned about coming to the UK as they had expected "*a really hard-core scene where everybody gets wasted every single night, and people don't go to lectures*" having seen photos of older friends at university "*drinking, clubbing and partying*" as well as "*a lot of like advice on the internet…how to handle alcohol in the first week of university*". For that reason they had purchased tickets to the non-drinking focused events available during freshers' week in advance of their arrival to university. Upon arrival to university, they met friendly British flatmates who encouraged her to come to the club, so they did. As they felt comfortable and safe with their new friends, and that they were trustworthy people to drink with so continued going to the club nights during freshers' week.

> *The first night of fresher's I actually bought a ticket to go bowling instead 'cos I was worried that I didn't want to go to the clubs. But I changed my mind last minute and I went to the clubs instead.*
>
> ***Int: Why did you decide to go and do those kind of events?***

Mainly 'cos of peer pressure …The first night was like my friends were like, "Come and try it out. If you like it then you can come join us 'cos this is like you're in UK right now, you have to try out the student life. And you're in ... it's in Freshers' Week, you have to do it" … I went to a club and I, I liked it so I went back the second night.

At the beginning of the academic semester, she talked about taking part in drinking games her friends were playing but was not always drinking alcohol, as it was considered that important to have fun. As the semester progressed, however, they found that drinking "*increases the fun*" of going out with friends. Drinking for her had played a big part the formation of friendships:

I'm not gonna lie, going out and getting drunk, it's fun and that's where most of my friendships stem from, just being there for each other and telling each other drunken stories and just being in like the same drunkenness state together.

Similarly to being encouraged to attend club nights by her peers, she also reported sometimes being encouraged or coerced to drink by them, but highlighted that they are respectful of her limits *"some of them do encourage but they, they know when to stop, they can tell".* Seeing peers getting drunk in, then experiencing being drunk and being in a safe environment meant she had become "*more open to"* drinking and getting drunk at university.

I think one of the main reasons is that because I've gotten more comfortable with them and I've seen them drunk and then I know that if I get drunk, they will look after me in the same way, which they do so I just feel more open about it because I know no matter what, they'll always be there for me and that's one of the main reasons why I'm doing, I actually get drunk.

Abstainer (B2)

As described in Figure 5.1, B2 felt there was a culture of drinking to get drunk in the UK, seen especially in university social culture. Before university, she described how when

attending social events that involved drinking, such as 18th birthday celebrations, she found it difficult and confusing because her peers were often drunk and so rarely engaged in this social culture.

Having heard stories and photographs on social media from peers already at university, she expected that during freshers' week *"everyone would be completely drunk*" and she would be *"the only one not drinking"*. She consequently felt that she would not able to join in with the social events taking place during freshers' week because they would involve others getting drunk and she felt uncomfortable to be in such an environment with people she did not know. Upon arrival to university, her expectations were realised as every conversation with new people revolved around the nightclub events which she had not attended. As a result, she reported feeling anxious at the end of freshers' week as she *"[hadn't] met proper friends yet"* and was hopeful that the *"drinking thing dies down a bit".*

During the academic year, she continued to feel alienated from the social culture due to the fact that most peers would focus on going to nightclubs and getting drunk, which made it *"more difficult to make friends".* Although peers would invite her along to these events, she continued to feel uncomfortable to put herself in a nightclubbing environment and so declined. She reported feeling a pressure to go as a result of this, although emphasised there was no direct pressure from anybody to begin drinking.

> *I made friends with someone who seemed, like alright, they'd tend to invite me out on a club night. But because I hadn't been out yet, I didn't really feel like I wanted to go, if that makes sense? So I felt under pressure, that it's harder for me. Because there was one girl who kept asking me to go out on a club night, but I think she kind of just gave up … I just felt under pressure… I don't feel under pressure to drink, but I'm always a bit curious to know what it's like. But I don't feel under pressure, like they don't put me under pressure or anything.*

Upon joining student societies she noticed how different societies created "*different social atmospheres*" in terms of how much alcohol featured in their events. She tended to engage more with those who provided more non-drinking focused socialising, and in the case of a sports society, only went to the training sessions rather than social events. As a result she felt she did not make any friends in this group.

> *In terms of football, I don't feel like that made any difference in who I'm friends with now, because erm, I didn't really meet anyone there who I'm really close to… because their events are mostly clubbing.*

Overall, at the end of the year she felt that the focus of others to drink and get drunk when socialising had shaped her university experience and led her to "*miss out on a lot of things*", because drinking was considered a "*bonding experience*" for many.

5.3.3 Students' drinking behaviour

This is the third theme of four and covers students' drinking behaviour prior to university, during freshers' week and across the year, the consequences experienced by them and others as a result, as well as abstainers' decision to not drink and how this changed for some upon arrival to university.

5.3.3.1 Abstainers' decision to not drink

The majority of abstainers did not drink for religious reasons and for some, seeing peers drunk or learning about the health and social consequences prior to university reinforced this decision. Other reasons included wanting to avoid the health consequences, disliking the taste and/or effect of alcohol, and wanting to stay in control when socialising (i.e. not

wanting to get drunk). A couple of abstainers had also seen family members drunk or struggle with alcohol and felt that drinking was not "*worth it*" (Female, B6 (T1)). The majority of abstainers remained non-drinkers throughout their first year at university. One student who classed himself as an abstainer, although had drunk once previously at his school leavers' ball, began drinking during freshers' week:

> *I had the feeling that freshers' week was a time for trying that, so I went out twice, drank as much or more than the other people in my flat, and then, that was [a] new experience I suppose.* Male, B10 (T1)

After freshers' week, he described his drinking as "*spontaneous*" and "*not constant*", drinking four or five single servings of spirits on two drinking occasions with flatmates during the first semester. This changed as he found a friendship group on his course who did not drink heavily and with whom he drank "*just a pint or two of cider*" on the odd occasion, after a different activity such as ice-skating. Another abstainer who disliked the idea of being drunk and the nightclub culture that typically encompasses drinking began to drink lightly during the first semester as a way to fit in with her flatmates, "*it makes you seem a bit more interesting really and I can join in a lot with my friends*" (Female, B6 (T2)). However, she still preferred to socialise where drinking was not involved.

5.3.3.2 First drinking experiences

Many of the students who drank had first tried alcohol when their parents offered sips of wine or beer with dinner. For most, their first experience of drinking socially was at house parties around the age of 16. Those who reported starting to drink at the age of 17 or 18 felt it was "*quite late compared to everyone else*" (Male, A9 (T1)). Some students who drank at house parties felt that it was a normal part of growing up or because everyone else was

doing it and they wanted to join in with this new social opportunity, *"we were getting a bit older so it seemed like the right thing"* (Female, A13 (T1)).

5.3.3.3 Drinking pattern & drinking intentions

In the months prior to university, many students describe how they drank increasingly more frequently and in greater quantities. How frequently students drank varied greatly (from weekly to monthly) but none reported drinking more than once a week on a regular basis. The typical amount students reported drinking varied, ranging from "*one or two*" drinks (Female, A13 (T1)) to "*half a litre of spirit*" (Male, A14 (T1)). How much students drank also depended upon the occasion. Going to a nightclub or a house party would involve heavy drinking and going to a pub would involve lighter-to-moderate drinking, although again this varied between drinkers. Some also reported pre-drinking before going to a nightclub as the cost of drinking outside the home was high. Many drank with the intention to get drunk and learn how much they could handle whereas others drank in smaller quantities to avoid getting "properly drunk".

> *So a typical night out for us would be pre-drinks and get quite drunk but not so drunk you can't get yourself to wherever you're going, and then probably very few drinks once you get there because it's too expensive. So maybe one or two drinks in the club … Different in a pub. I'd probably get less drunk at a pub.* Female, A2 (T1)

There were three exceptions in the drinkers group, who drank rarely in the year preceding university. One was an occasional, light drinker in line with her parents' and friends' behaviour. Two of these were on a gap year; one only drank when their friends returned from university for the holidays and the other had stopped drinking because of a medical condition, "*I developed basically IBS-type symptoms, which meant that I couldn't really drink very much or almost at all"* (Female, A12 (T1)), although both reported that they engaged in binge drink sessions during the final year of school.

During freshers' week, all students reported drinking more frequently than ever before. The typical amount students drank during freshers' week varied, from three drinks, to "*a third to a half"* of a "*70cl bottle of spirits*" (Male, A15 (T1)), with several reporting that they drank "*more alcohol in fresher's week than I've ever drunk before and it was consecutive nights*" (Female, A2 (T1)). Some of these students also reported changing their drinking style.

> *I think here though there's been more like erm there's been like doing seven shots in a row, stuff like that. And that never – that never happened at home… Here there's more of, 'oh we found a place that does one pound Jägerbombs, let's just have like about 10.'* Male, A15 (T1)

There were some drinkers who drank less than usual during freshers' week. This was because they felt stressed about the move to university, did not feel comfortable getting drunk among new peers or became ill towards the end of the week and decided to stop drinking. Many students said they drank a lot as they were *"living up to the expectation, fulfilling that*" (Female, A2 (T1)) or because *"that's what everyone was doing"* (ibid). Many of the students did not consider or reflect on how much they had drunk during freshers' week until it was over, or during their interview.

> *I feel like while you're drinking on the night, you kind of, unless you're, you feel ill, you don't realise how much you've drank 'cause you're just having a good time but once it gets to the end of the week and you sort of look back, you suddenly realise that 'oh wow, that was … a lot.'* Female, A5 (T1)

Across the first semester, all students reported drinking less frequently than during freshers' week, but more often than before university. Some had a regular pattern, drinking several times a week, or once a week or fortnight. For others it was more erratic:

> *Actually throughout the term, I feel like I haven't been going out as much as I thought I would. Erm, and not nearly as much as like everyone else that I live with has mainly because my little group of four weren't going out that often. But then my birthday week I went out every day and then since then it's been quite a bit more.* Male, A15 (T2)

The way in which students' drinking patterns changed across the year, in terms of quantity drunk per occasion, varied. Some students continued to drink similar quantities of alcohol as they did in freshers' week, some mixed light drinking occasions with heavy drinking occasions and a few reported that they had steadily increased how much they drank on each occasion across the year, "*I'd got into the habit of drinking so I needed to drink more to have the same effect as it did at the start of last term*" (Female, A5 (T3)). One female began to reduce how often she drank during the first semester, either avoiding club nights or choosing to not drink on them, "*I've had quite a few nights out where I just, sort of, haven't drank at all"* (Female, A8 (T2)).

5.3.3.4 Other students' drinking behaviour

When asked about their university peers' drinking behaviour, regardless of how much they drank, all students who drank referred to friends or housemates who consistently drank more and/or more frequently than them. Most drinkers felt the majority of their peers got drunk regularly.

> *More intense, like put more vodka in their drinks. Drinking drinks that taste bad but they know it'll get them drunk if you know what I mean?* Female, A13 (T2)

There was also a general perception among the students who were drinkers that males drank more than females but each reached a similar level of intoxication. Several students said they would drink similar amounts of alcohol to their peers, by sharing drinks during pre-drinking sessions and buying rounds or drinks together when in a bar or nightclub. Similarly,

students who said they drank in small quantities and infrequently said they were able to do this because their friends did also.

Among the abstainers, many observed that a large proportion of people at university did drink and felt the majority of them drank to excess or binged when they did so.

> *I think people really just want to get drunk, like they don't really care about having a drink that tastes good, erm, it's more like just getting drunk, just getting really, really drunk so they can go out and have fun.* Female, B13 (T3)

Several commented that although they noticed a reduction in how frequently others drank after freshers' week, most students still focused on drinking when socialising. Many felt this was excessive whereas others were unperturbed as they had met peers who did not drink, or only drank a little, who they could relate to.

5.3.3.5 Drinking consequences

Most of the students did not consider that they had experienced any negative consequences as a result of their own drinking prior to or throughout their first year at university. Those that had considered them to be minor incidents, which included falling over, having to be taken home by a friend, or being "*denied entry into club*" from having "*slightly too much to drink during a pre-drinking session*" (Male, A7 (T2)). Most abstainers reported regular noise disturbances by flatmates when they were pre-drinking or returning from a night out, which affected their sleep. This was a particular problem during freshers' week and the first term, although as the year progressed it became less frequent.

> *Well, since my house is quite [a lot of] sports guys, like my corridor, when they come back at three or four in the morning they will wake up everyone. So that's been*

quite difficult, like they start screaming, jumping, running, banging on doors. Female, B11 (T2)

All students knew of another who had experienced something negative due to excessive drinking whilst at university. This included being sick or requiring medical intervention at nightclubs, male friends initiating or participating in fights, and sexual relationships that were later regretted. Many students had a night cut short because a friend had drunk too much.

That would be like pre, pre and beforehand, they just like get too drunk, it's like why are you doing this? We're here for a good night, not to look after you. Male, A9 (T2)

Among those who had experienced something negative as a result of how much they had drunk, it was female students who reflected upon their or others behaviour. Despite this, only one actually reported decreasing her alcohol intake because of this. None of the male students felt there was a need to change how much they drank.

And waking up in the morning where you're either covered in chips or you look over the other side of your bed and it's got a massive vomit stain … I just sort of think it's like ... there's no permanent, I feel like there's no permanent damage done erm, and I just sort of think it's quite funny, it's just, "Oh what are you like?", that sort of thing. Male, A15 (T2)

Figure 5.3 Case studies for the students' drinking behaviour theme

The case study goes on below to describe the changes in drinking behaviour for A6 across the academic year, and how both A6 and B2 perceived their drinking status.

Drinker (A6)

Before coming to university, A6 started drinking on their 18th birthday, mainly because of "*peer pressure from friends*" and would "*usually just [have] a glass of beer and that's it*" on any other social occasion where peers were drinking.

During freshers' week, they began drinking more often and in higher quantities when socialising with peers, "*on my first night I had a vodka lemonade, another vodka lemonade, a shot of Jägerbomb, and a double vodka lemonade, and a shot ... half a shot of vodka*" and "*a little bit less*" on other nights. She described how her drinking behaviour was "*more reckless but still in control"* and that she drank less than her peers.

> *Um, my friends. 'Cos a few of them are heavyweights so they can drink, they drink a lot. And they drink a lot yet just so like they're not too tipsy so that's fine. Then we have our other friends who drink until they're tipsy and drunk. So they drink quite a lot. They go shots after shots after shots.*

During the first semester, she described how she initially drank once or twice a fortnight, averaging four drinks on a drinking occasion and often went to a nightclub "*sober or not drunk at all, just a bit slightly tipsy*". As the year progressed she described how she was *"more open to trying different types of alcohol and I'm not as hesitant as I was to drink alcohol"* so had started drinking more and had a few "*drunk occasions*". Personally she did not experience any negative side-effects of her own alcohol consumption as was able to "*stay in control*" but described friends as "*heavy weights"* who would get drunk often and had seen them be sick, have to be looked after by friends, and get kicked out of nightclubs.

Abstainer (B2)

The main decision to not drink was a religious one for B2, but she described how learning about how alcohol negatively impacts upon health and seeing its impact on people in social situations were also factors in this decision.

> *The more time passes you find that there is more research that shows you that that it isn't like good for you. But also, I think it's the social aspect, like I see people who drink a lot, but when they speak they say, "Oh it makes me so much more confident" … I don't particularly enjoy being around drunk people, because I*

feel like it's not really them and it just, it confuses me… I prefer to have like a conversation, but it makes having a conversation a lot more difficult and just quite superficial.

Before university, although she described how she "*did not need to have alcohol to have fun*", she did report feeling tempted to try it when socialising with friends. She remained a non-drinker throughout her first year of university, and although did feel curious as to what it was like, remained adamant that she did not want to start drinking alcohol.

I haven't like been tempted to have a drink, I'm more curious like what it'd taste like, if that makes sense or maybe what it feels like but it was never like it's in front of me and I really want to have a sip, if that makes sense.

5.3.4 Nature and perceptions of the social opportunities at university

This is the final theme, covering the nature of social events and opportunities at the university during freshers' week and across the year, and students' perceptions of the balance of drinking and non-drinking focused events.

5.3.4.1 Social events and opportunities during freshers' week

Many students attended events that were organised by the SU during freshers' week, for which tickets were sold online in advance of students arriving to university and by JCR (Junior Common Room) reps during freshers' week. They described that each night there was a nightclub event where there would be drinking, and often an alternative event where there would be no drinking involved at each halls of residence, although the latter was not always provided or they took place in the daytime during lecture hours.

> *First week there was a night out every night. Erm, there was like film nights … There was loads of stuff like ice skating, and a lot of stuff during the day. But on the evenings mainly was just nights out rather than [alternatives].* Female, A10 (T1)

In addition to the SU events, some halls of residences organised food-based socials such as pizza or ice cream nights. For some halls of residence, there were no SU events on the weekend that students were due to move in (the weekend preceding freshers' week); for these nights, students either socialised in their accommodation, at the SU bar, or went to a nightclub with their housemates as they "*just wanted to have an icebreaker*" (Male, A1 (T1)). Most of the students who drank, as well as a couple of abstainers, went to several of the SU organised nightclub events during freshers' week. For students who drank these nights often involved pre-loading and getting drunk. When not attending these events, some organised their own evening drinking in town or staying in their flat playing drinking games. Others stayed in their flat and socialised with flatmates without alcohol; a few of the drinkers went to the activity-based events organised by the SU, such as trampolining and ice-skating.

The nightclub events were thought to be a good opportunity by most of the students who drank, and a couple of abstainers, to get into the university spirit, find out about the best nightlife spots and "*meet other people in the halls*" (Female, A13 (T1)) who were attending.

> *I thought it was important to try and make friends with the people who I was going to be living with for the next year. So I tended to go out with them rather than to say to the outdoor cinema sort of thing.* Female, A8 (T1)

Students who attended the non-drinking focused events went because they considered them to be a good alternative to nightclubbing and drinking, although one student reported getting drunk after one of these events.

> *And then after ice skating we went – ended up wandering around the city centre and we found [bar] and found out that they do 28 shots for 20 quid, which between*

> *four of ya is seven shots for a fiver so they all disappeared quite quickly and then like had some like cocktails … We sort of felt like, 'Oh its fresher's', we don't want to go home just yet.* Male, A15 (T1)

One student reported that a pizza-night at her halls of residence was poorly organised, "*…we had to wait like two hours for the pizza. In the end everybody just went off to the clubs, 'cos the clubs was like the biggest events of the night for Freshers' Week. So I didn't really go for the rest of the events*" (Female, A6 (T1)). Students that did not go to non-drinking focused events, both drinkers and abstainers, said that they were either not aware of them, *"I was barely aware of anything that wasn't alcohol fuelled"* (Female, B6 (T1)), wanted to go but felt they could not suggest it to peers who were attending nightclub events for fear of being ostracised, or felt they were "*nothing attractive really*" (Female, B13 (T1)). A few drinkers said they preferred to relax in their flat when not nightclubbing or that the particular nightclub events they wanted to attend clashed with non-drinking focused events. However, several said they would have attended them over a nightclub event, had their peers shown an interest.

> *No-one kind of said, "Oh we should go to this [non-drinking event]" and I didn't want to be the one to be like, "oh yeah we'll do that", in case everyone sort of sat there a bit like, "Oh she's obviously not gonna want to go out loads, she wants to not, sort of, drink much."* Female, A5 (T1)

Additionally, some students reported they weren't able to attend some of the non-drinking focused events as they were in the daytime and clashed with introductory lectures, or they had difficulty in accessing tickets, "*my halls didn't even sell the tickets to it*" (Female, A10 (T1)). One student who expected she would attend the alternative events and not drink during freshers' week ended up doing the opposite.

> *I actually bought a ticket to go bowling instead 'cos I was worried that like I didn't want to go to the clubs. But I changed my mind last minute and I went to the clubs instead … I found a group of friends who are like really chilled and really laid back*

> *and they asked me to go like try out one night at the club with them, and if I liked it I could go back the second night, if not they would just let me go to do my own events. And I found out that I quite liked it so I joined them again a second night.* Female, A6 (T1)

It was generally felt that the week was too heavily orientated towards nightclubs, which involved drinking and getting drunk.

> *I kind of wish they had a few more events that weren't necessarily drinking involved, I mean I know that you can go out and not drink but pretty much everyone does.* Male, A14 (T1)

A few said they would have appreciated icebreaker events on the first weekend that were not focused on drinking, *"you don't find out people's interests, you can't have a conversation, it's just not the same. Whereas if we'd had a night maybe doing an activity, I think that would have been better to meet people, rather than a night out…"* (Female, A10 (T1)). Several drinkers and abstainers who were not aware of the non-drinking focused events said they would have liked there to have been "*more events in the evening, not related to clubbing and partying*" (Male, B12 (T1), throughout freshers' week. Additionally, for many abstainers, a nightclub event "*wasn't something that appealed*" (Female, B13 (T1)) and the dearth of alternative events (in their understanding) meant some "*had nothing to do*" and left them feeling "*rather lonely and disconnected and not really part of the whole university experience*" (Male, B9 (T1)).

5.3.4.2 Social events and opportunities during term time

After freshers' week, students then continued to socialise within their friendship groups and/or attended social events organised by student-led sport clubs, societies, and JCR

committees in halls of residences. These are presented each in turn below, followed by participants' views of the range of social opportunities available across the year.

5.3.4.2.1 Socialising within friendship groups

For drinkers, and the couple of abstainers who enjoyed the freshers' week nightclub events, social occasions organised within friendship groups typically involved going to a nightclub or on an organised bar crawl. Some went on a regular basis (from once a fortnight, to two or three times a week), for others there was a less clear pattern of socialising "*there were some weeks I didn't go out at all and then there was some weeks where I went our twice or maybe three times. So as an average I'd probably say once a week*" Male, A15 (T2). These occasions were nearly always preceded with drinking heavily at home (as described in **the university drinking culture** theme), "*it's always just pre-drinking and then drinking in the club*" (Male, A15 (T2)). Some students interchanged these drinking occasions with having relaxed drinks at the SU bar or a pub, which would involve drinking less alcohol.

> *I've been to the student union bar, maybe like every other week, with some girls from my course … it's definitely very different. It's definitely not somewhere where I've ever seen anyone get particularly drunk.* Female, A12 (T2)

For abstainers, typical social occasions within their friendship groups included going to coffee shops, a bar where drinking was not the focus, and the cinema. Some said they went to a nightclub out of curiosity but did not enjoy being in an environment where most people were drunk, "*… you bump into people and since people are already very toxic [intoxicated] they can get more easily violent and try to start a fight or something"* (Female, B11 (T2)). Some felt excluded from their friendship groups when they chose to go nightclubbing because of the alcohol consumption.

I've been invited a couple of times, but I haven't been yet. I suppose because they're all drinking and I'm not ... I just feel a bit excluded … I don't know if it would make a difference, but I feel like it would. Male, B3 (T2)

During the second semester, all students reported that they socialised within their friendship groups in the same way they had during the first semester. For some drinkers, the frequency of going out to nightclubs increased and for others it decreased.

5.3.4.2.2 Society and sport club socialising

Most students joined at least one society or sport club in the first semester. Societies that students joined spanned course-, cultural-, political-, religious-, music-, and arts-related groups. Some societies offered meetings or training sessions based on their interest only, but most offered social events in addition to these, which the majority of students attended. In many cases, their first social events of the year took place in the two weeks following freshers' week and were focused upon heavy drinking, "*After the first taster session they said how they had like a social on Wednesday … it was after Freshers' Week, the Wednesday after yeah …some of them did drink quite a lot, but quite a few there didn't drink as well."* Female, A8 (T2).

A few of the groups regularly followed their meetings with a relaxed drink at the SU bar or a local pub, which both drinkers and abstainers said was an opportunity to socialise in an environment that was not focused on drinking.

They do a screening of the different shows… And after that for people who want to, they go down to [SU bar] and talk about what we've just seen ... there's two or

three who do drink and two or three who don't… they don't get drunk, they just have some alcohol. Female, B4 (T2)

One drinker reported that the political debate group they had joined based their meetings on drinking, "*It's called Port & Policy"* (A3, Male (T2)) where members would get drunk whilst discussing political issues, which led to raucous behaviour "*two people got into an actual fist fight*" (ibid).

Overall, most students were in agreement that between the sports clubs and societies there was a variety of social opportunities across the year, with some providing social events with "*more of an emphasis of getting to know each other more and meeting new people … rather than having alcohol"* (Male, B1 (T3)), whereas others only offered those *"centralised around drinking."* Female, A10 (T2). Some students reported that their sports clubs would attend a particular club night "*pretty much every Wednesday*", after training or a match, or drank after matches at the weekend; "*they'd say someone's house as well that you're going to go to for pre-drinks and then you'd go from there altogether*" (Female, A8 (T2)). One abstainer said that although her sports club first social event was a pub quiz, where drinking was not a focus and she felt comfortable to attend, the social events across the remainder of the year involved nightclubs and heavy drinking. Having heard about other sport clubs offering events not focused on drinking, "*they go out for meals and stuff"* (Female, B2 (T2)), she wished she had that same opportunity, *"Everything else is just clubbing … I kind of wished they'd done more things socially"* (ibid).

There were mixed feelings about the extent to which non-alcoholic events were offered. For instance, one drinker felt annoyed that these were promised by her sports team but the only social events going forward were club nights, described as an opportunity to "*get smashed*"

(Female, A8 (T2)). One abstainer, however, was happy with the nightclubbing events as it was an opportunity to socialise with his sports team, "*it's a team bonding thing*" (Male, B7 (T2)). Another drinker felt that at the start of term his course society weren't offering "*many other options that aren't alcohol orientated*" (Male, A4 (T1)) and questioned what his member's fee was going towards. Some of the abstainers were pleased with what their society offered in the way of non-drinking focused social occasions, "*we have a few socials just meeting up to watch movies and then with the Christian Union, going out and doing things like, we all went to play laser tag this week … I've had plenty to keep doing and I've never been bored*" (Female, B5 (T3)), but others felt that these type of events did not take place often enough. In one example, two abstainers described how a Muslim society organised a social event at a local bar where some students drank a little and others did not drink at all. They felt it provided a good opportunity to socialise in a relaxed, adult environment but wanted these type of events to *"be more frequent*" (Female, B2 (T2)). Among the drinkers who did not attend societies and sports clubs non-drinking focused opportunities said that they "*haven't really appealed*" (Female, A5 (T3)) or they took place at a time that did not fit into their timetable, like a nightclubbing event would.

> *It was the timing 'cause like we'd have a lecture finishing at 6 and then it'd be straight after that we have dinner at, it finishes at 7 so it, we wouldn't be able to like have dinner and get there.* Female, A13 (T2)

5.3.4.2.3 JCR events

Events organised by the halls of residence Junior Common Room (JCR) teams took place infrequently across the year and were "*mainly drinking events*" (Male, A14 (T2)). The most commonly attended event were the formal dinners followed by nightclub after parties. The

ticket price included wine although some students reported they or others drank beforehand and/or drank heavily at the event.

> *Most people were just drinking wine at the formal and then going onto the harder stuff afterwards, while they were in [the bar]. I think a lot of people kind of were like, "Yeah a formal, let's get pissed." I was like, "Yeah a formal, let's have a good time."* Female, B5 (T2)

Other JCR-organised events included film nights, but these were not popular as students were charged to attend, "*we would rather not spend money and just watch it in our own rooms*" (Female, A6 (T3)). Another student who drank wanted her JCR to "*be more non-drinker friendly*" as "*drinking is the main aspect*" (Female, A8 (T3)) of the socials available in her halls of residence. In the final week of term, students reported their JCR team were organising a variety of events including activity-based events in the daytime, such as "*a summer fun day and then an open air cinema*" and drinking-focused events, such as "*a bar crawl*" and "*a formal and a social which ends in [nightclub]*" in the evening where people expected to be "*very, very drunk*" (Female, A6 (T3)).

5.3.4.2.4 Range of social opportunities across the university year

Looking across the academic term at the range of opportunities to socialise, through friendship groups, student-led societies, and in halls of residence, both drinkers and abstainers felt that there was a greater variety of social opportunities not based on drinking after freshers' week had finished, and this continued to increase throughout the year. This was in part because they joined student-led societies and sports clubs which offered sessions related to their interest.

> *It's definitely been a lot better like in terms of like being able to be sociable and not have to go out on a night out or anything. Yeah, definitely better than the first*

semester. And I think because I found the societies that I like to be in it's been a lot better than before. Female, A10 (T3)

However, there was still a heavy focus toward socials based on drinking through many of the student-led societies and with a "*constant weekly rota of nights out in different clubs*" (Male, A1 (T3)). Many felt it took an extra effort to find non-drinking focused events whereas others felt they had plenty to choose from, *"there's always something going on … the university has amazing social events"* (Female, B15 (T2)). One abstainer commented that for those who did not drink, "*the only thing that's regularly offered is a club night*" (Female, B2 (T3)), and several said they had "*feel a bit excluded*" (Male, B3 (T3)) by the abundance of drinking events. Some drinkers were happy with the abundance of drinking-focused opportunities and felt that "*there's always the option to not drink at the social if you don't want to*", (Female, A2 (T3)) so non-drinkers could join in, although acknowledged that "*I just don't think people do*" (ibid). However, along with many of the abstainers, there were also drinkers who wanted more activity-based events and socialising opportunities where drinking wasn't the focus to be available in the evenings.

5.3.4.3 How social opportunities at university were advertised and promoted

The events taking place during freshers' week were advertised in several ways: through the SU freshers' week website and Facebook page; in daily emails and posters around the campus during freshers' week from the SU; from student reps who sold tickets to the events in halls of residence; in welcome packs placed into student rooms; and posters delivered under front doors of student flats. Some students also saw an unofficial freshers' week Facebook page, operated by an external organisation, which featured clubbing events not organised in conjunction with the SU.

> *We got a sort of handbook where they sort of said, "These are the events that are going on", like "these are the ones you can attend, here's where you get your tickets, this is where they're being held".* Female, A5 (T1)

Many students felt the advertising and promotion of events during freshers' week by the SU were "*definitely focused on the drinking nights*" (Male, A1 (T1)) and non-drinking focused events, such as ice skating and trampolining nights, were given less focus and attention. On the SU website, nightclub events were thought to stand out more, with "*huge, flashy pictures and stuff next to them but then the rest would just be a line of text and you just have to click on it to open it*" (Male, A14 (T1)). Some student reps were felt to be more persuasive in their effort to sell nightclub event tickets during freshers' week, "*they were definitely pushing club nights, yeah, 100%*" (Male, B8 (T1)). Some students (drinkers and abstainers) reported they had to actively seek out non-drinking opportunities, because they were not advertised as much as nightclub events, *"I had to actually look for that rather than just getting sent to me"* (Female, B13 (T1)).

> *It almost seems as though they didn't bother, that they knew that what most people would want to know about, the most common denominator, they would want to go to the parties and wouldn't be very interested in the other events and sort of left it to the people who weren't going to find their own thing to do.* Male, B9 (T1)

During term-time, events and social opportunities from nightclubs, student-led societies and sport clubs were advertised "*through Facebook*" (Male, A15 (T2)). Club nights and other alcohol-related events continued to be "*the ones that are most widely advertised*" (Female, B4 (T2)), although within student-led societies and sport clubs the degree to which they advertised drinking and non-drinking events differed. A few students felt that some student-

led groups put "*less emphasis*" in advertising non-drinking events (Female, A15 (T2)) but for others there "*doesn't seem like there's any bias or anything to a particular style of activity, they're just all promoted equally*" (Male, A14 (T2)). Additionally, nightclubs promoted their events via e-mail, "*flyers under the door*" (Female, A12 (T2)), or sending nightclub reps (first year students) to promote events in the halls of residence. Word of mouth and a nightclub's reputation also appeared to play a big role in knowing about events, *"It's basically become common knowledge now that Wednesday nights are [nightclub event] nights and Monday nights are [nightclub event] at [nightclub]"* Male, A7 (T2). One student felt it was much easier to go nightclubbing because freshers' week had acted as an introduction to the nightclubs and alternative activities needed more promotion.

> *There is a lot of promotion around clubs, I think there could be more about other things to do, like I know it's little and you'd expect like there to be bowling and things in [city] but just finding out about how to, where it is and if they have special deals on 'cause I know clubs often have deals to make you want to go but just like, bowling or laser tag or whatever.* Female, A13 (T2)

Figure 5.4 Case studies for the nature and perceptions of the social opportunities at university theme

The final section of the case studies continues in relation to their experiences and perceptions of social environment across the academic year.

Drinker (A6)

A6 had expected to go to all the non-drinking focused events that were organised by the SU during freshers' week because, as exemplified in Figures 5.2 and 5.3, they typically did not drink or engage in the drinking culture before coming to university. However, she ended up attending nightclubbing events instead because her flatmates had encouraged her to attend. She described how "*the clubs was like the biggest events of the night for*

Freshers' Week", being a "*focus"* on the SU's freshers' week website which advertised the events taking place, and were "*well organised*" compared to other events. Of the non-drinking focused events they did go to was a pizza night in their halls of residence, which was poorly organised with the pizza arriving late and there not being enough for everyone, this put them off going back for other non-club nights.

> *When the time came it wasn't that organised 'cos we had to wait like two hours for the pizza, in the end everybody just went off to the clubs. So I didn't really go for the rest of the events.*

They felt that the non-drinking focused events could have been *"promoted more during the dinners and during meetings*" for those who did not drink. They felt that these events were really important to have as she had been nervous about the focus on drinking before coming to university, and despite having not attended them in the end it would have been a good alternative social activity had friends not taken her to a club.

Socialising in the academic term then focused upon playing drinking games in their flat with friends, or continuing to "*go out as a flat*" to club nights once or twice a fortnight, where drinking played an important role.

> *If there's a big group of us, like around 10 to 16 of us at most, so we have a few clubs that we like and we sort of decide like ok we'll just go out to that club. Then what we do is all of us get together in someone's room and we just pre-drink. Then we play some alcohol games and we just go out.*

Socialising with friends would otherwise involve relaxing in her flat with a film; the only non-drinking event they had done out of the flat was going to Bonfire Night. She did not join any student societies, but had attended events organised by her halls of residences JCR team, the majority of which involved drinking such as the formals where "*there was quite a lot of alcohol involved*" and "*everybody in general… was intoxicated*".

Abstainer (B2)

B2 described how the majority events during freshers' week were in the evening nightclubbing events, and mostly centred on students who were living in halls of residences, which made it difficult to go to many things by herself. She actively looked for and was able to attend non-drinking focused events that she did go to, including a society meet and greet, but felt that the majority of these were in the daytime which clashed with introductory lectures, were not enticing enough to go to:

> *A lot of the things I wanted to go to was during my introductory talks… during Freshers' Week I'd prefer more events in the evening. Erm, also I didn't want to go, there were some I didn't want to go to, I thought they would be a bit weird… like the cake in the park one.*

She also felt some of these events were poorly planned, having arrived for an event that did not take place where advertised, *"the Student Union website, they had loads of events on there, there was one I was going to go to, a [trampolining] one. But erm, when I looked at the event again on the day, it didn't say anything, it just said 'Bounce Sunday'. So I didn't realise where, it didn't have a location, didn't have anything and no one turned up [laughs]. Yeah so I think I was in the wrong place erm."* She would have liked to have seen a "*broader range*" of events.

As described in Figure 5.2, she joined several student societies at the beginning of the term as an opportunity to get to know people. Some of these societies focused on drinking and getting drunk in their social events and others did not. Of the latter, non-drinking focused social events were fewer and far between, or *"didn't sound very exciting"* compared to those which did focus on drinking and getting drunk, which she felt disappointed by. She generally felt that student societies had too great an emphasis on drinking in their social events, which inhibited her participating in or getting to know

members of the society. In one instance, the football team she was a part organised a pub quiz as their first social event of the academic year, which was a suitable option for her as a non-drinker as the focus was not to get drunk. The rest of the social events in the academic year, however, were club nights where students were "*pre-ing very hard*" and getting drunk. As a result of the dearth of social opportunities suitable for her through the student societies, she moved away from them in the second semester and focused more on seeing friends she had made independently.

> *It's had less to do with societies in the second semester and more just I've been meeting up with people a bit more. Erm, going to the gym a lot more and just meeting up with people for lunch or for dinner or something, and going to the cinema and the park when the weather's nice.*

Reflecting over the whole year, she highlighted how because socialising at university is mostly focused on "*drinking and partying*" with no equivalent "*events for people who don't drink*", this had made her first year at university "*difficult*", feeling as though she had *"missed a lot of things*" and like she *"didn't really get the full university experience".*

5.4 Discussion

5.4.1 Main findings

This study found that students' experiences with alcohol change upon arrival to university, becoming a more frequent part of their social lives as well as drinking in higher amounts. In particular, alcohol featured heavily during freshers' week, on a near-daily basis for many of the drinkers. This in part appeared to be driven by students' expectations that socialising at university is centralised around drinking as well as the provision of daily nightclub events by the SU, which received greater attention in the lead up to and during freshers' week. The

extent to which alcohol featured in students' social lives appeared to reduce after freshers' week but remained higher than prior to university. Several abstainers reported feeling socially excluded due to the dearth of non-alcoholic focused social events across the year, although some were able to find friendships with other non-drinkers quickly.

No clear differences emerged between males and females in their experiences of drinking. Male and female abstainers both reported how they could feel socially ostracised by peers drinking. Equally, male and female drinkers reported how they engaged in heavy drinking sessions within mixed peer groups. This may therefore be reflective of the convergence in drinking habits reported between the sexes in recent years (185), which is suggested to be driven by the emergence of ladette culture and an increased focus upon marketing alcohol to young women (223). So too with drinkers and abstainers, no clear cut difference in the preference or dislike of the social events and binge drinking culture was found, with participants within both groups expressing positive or negative views. Many drinkers and abstainers highlighted a need for there to be more non-drinking focused opportunities and less emphasis on drinking throughout the year.

5.4.2 Before university

Students' reports of how they drank and engaged with youth drinking culture before university suggests that many enter the university environment with an established pattern of binge drinking and intentions to get drunk. Further, students came to university with an expectation to drink and/or get drunk on a regular basis during freshers' week and beyond, because they had been told by older peers or siblings or had seen it in various media. Similar findings from a recent qualitative study of 23 first year university students in the UK also found that interpersonal and cultural influences, namely family, friends, media such as TV

and film, and advertising of SU run events during freshers' week were thought to 'pre-institutionalise' students by shaping and normalising their beliefs of heavy drinking at university before they had arrived (1). Prior to arrival at university, students in the present study were sent or saw advertisements for nightclubbing events that they associated with drinking and get drunk, which may have acted as a further influence to normalise excessive drinking prior to university, particularly as attendance at these type of venues is often associated with heavy drinking (136, 137).

In a large US cohort study of college students (135), alcohol was found to be associated with the college experience among students before they arrived at university, leading to the authors recommending that interventions seeking to reduce alcohol consumption among university students considering targeting them pre-arrival. Alongside the findings in this study that the majority of students also viewed drinking to get drunk as an acceptable behaviour prior to university, this suggests that pre-university is an important time for shaping beliefs around drinking at university.

Perceived descriptive and injunctive norms of drinking are thought to play a big role in student drinking behaviour, with students' typically overestimating how much peers drink and the extent to which they approve of heavy alcohol use (120, 128). This suggests students in this study may have believed that they were coming into an environment that is supportive of heavy drinking and felt an underlying expectation and pressure to drink heavily. Studies in the US have found perceived and injunctive norms are correlated with alcohol consumption throughout the first year; so the more someone believes others drink, the more they are likely to consume themselves (110). This is the basis of social norms interventions to correct students' (mis)perceptions of peer drinking. This highlights that pre-

arrival and the beginning of university are crucial periods for students' perceptions of drinking at university to be moderated.

Many students also reported engaging in pre-loading prior to university, a drinking practice associated with higher alcohol consumption and related adverse consequences (83, 138, 142, 143). Students who had prior engaged in pre-loading continued to do so at university and the majority of those who had not reported doing so during freshers' week. Previous studies on pre-loading among student populations have found that many engage in this behaviour (146); the finding that students are engaging in this practice prior to university and more so when joining university adds more weight to the argument that pre-arrival and the beginning of university are important times for shaping risky drinking practices. Previously cited reasons for pre-loading include to save money, get intoxicated and provide an environment for socialising and conversation (138, 143), although these studies were not conducted on student populations where the motivations to pre-load may differ slightly to a general cohort of young adults. Any intervention looking to tackle excessive drinking among university populations not only needs to take into account this drinking practice but should also explore their motivations for doing so.

5.4.3 Freshers' week

That students' appear to drink higher quantities and frequencies immediately upon arrival to university supports quantitative findings from recent studies that incoming undergraduate students drink significantly higher quantities of alcohol during the first week of the university term (113, 114), although these findings were from New Zealand cohorts so could not provide confirmation that this was occurring in the UK. Recent UK studies exploring student health behaviours (108, 224) have identified that drinking increases after joining university,

but none have explored drinking behaviour specifically during freshers' week, so this provides a unique finding to the UK. There appear to be several reasons for the observed changes in drinking behaviour, namely students' prior expectations of the university drinking culture as discussed above but also through the social environment created by the university, and peer influences.

The marketing information targeted towards students prior to university was backed up with daily club night events during freshers' week, a stark contrast to their previous social lives which was focused more on academic and extracurricular activities with intermittent drinking-focused events. Many students also reported that a lot of emphasis was put on the nightclubbing events through advertising by the SU, in the form of student reps, emails and their dedicated freshers' week website. Several students, both drinkers and abstainers, said they were not aware of the alternative events on offer that were not focused on drinking. Ticketing and timing issues also made it harder or affected students' ability to attend these events over lectures or nightclub events.

Many drinkers said they were motivated to attend nightclubbing events and drinking over the alternatives because their new peers were going and they did not want to miss out on the opportunity to make friends. They would have attended the alternative events had friends suggested it or if they were given equal attention and planning to club nights, as this would have given them the courage to suggest going. This highlights the importance and influence of peers on socialising and potentially then, drinking behaviour. In a study of 595 students at a Northern Irish University (109) two-thirds of the study population said their primary motive to drink was 'to be sociable'. This study also found that the lack of recreational facilities and entertainment focused away from drinking, alongside the desire to

please peers and not be socially isolated, were considered to be the key influential factors to alcohol misuse by the students themselves, although the latter was more influential among females than males. Peers are thought to be an important influence upon young peoples' drinking behaviour, particularly as they transition into adulthood (118, 120). Among first year students alcohol is seen as a social facilitator, used to provide commonality and develop friendship groups, and give students a sense of belonging in a new environment (1, 110), which students in the present study also described. This suggests that a key barrier to go and/or suggest going to alternative events to drinking is the fear of being socially isolated or ridiculed, which is of great importance to new students as they enter into a new environment and look to make new friends (1). Students' may have therefore felt that suggesting to attend an alternative event risked their successful social integration, particularly given the emphasis that was placed upon drinking-related events at the onset of university and in the weeks leading up to it.

This suggests that there is too much emphasis on events where drinking is considered a crucial component (according to students) during freshers' week, which is not what all students are looking for and affects what they perceive university socialising should consist of. A shift in the type of events that are organised during freshers' week and a greater emphasis than present on the non-drinking focused events could be one element in addressing the drinking culture and alcohol misuse at university. Further work with staff presented in the next chapter will explore how these events are organised and the potential opportunities and barriers to providing more events that are not focused upon drinking.

5.4.4 Term-time

The continuation of regular drinking-focused events and sustained advertising concords with students' reports that they drank at a higher frequency than prior to university. With most students continuing to socialise in a similar fashion to freshers' week, albeit less frequently, and feeling an underlying pressure to drink and get drunk when socialising suggests that this week may act as a gateway to long-term binge drinking behaviour by showcasing a certain way of socialising and making it appear the norm of student life, which students then adhere to when socialising within their peer groups. This belief was not shared by all drinkers, however, with a small minority who felt it was not a good way to have fun or did not feel pressure to get drunk and generally reported lower levels of drinking.

Sports clubs were identified by many students as those who engage in heavy drinking practices, with some leaders coercing and encouraging others to do so. Studies exploring drinking behaviour among students in a range of UK university sports clubs have reported higher levels of drinking (147, 148), as well as alcohol-related provocation and coercion to drink from members of sports teams (149, 150). Much of the latter has been described as occurring through initiation ceremonies into the teams, but also during general social events, with students reporting that they felt compelled to take part as it was considered a rite of passage or way to fit in and bond with team members; views which were reflected in this present study. Although initiations and hazing events were only described as being a sports team practice in the present study, students reported how a number of non-sports societies and committees organised drinking-based events, such as bar crawls and nightclubbing. Our study also identified that many societies were a source of non-drinking focused social opportunities, suggesting the existence of heavy drinking cultures may be limited to certain student-led groups. In a qualitative study at another UK university, although several student

leaders rated drinking as being of high importance in their social events, there were some considered it to be of no or detrimental value to their members (132).

In organising similar social events to those that first year students were exposed to and engaged with during freshers' week and beyond, it appears that such groups may play a part in preserving and influence over the university drinking culture. This highlights a potentially vicious circle whereby students come to university expecting drinking-focused socialising, are exposed to and engage with the abundance of drinking-focused events organised during freshers' week and in their first year, consider it to be the norm of socialising, and subsequently perpetuate this culture as a student leader. With a dearth of evidence on these groups, further work with student leaders should consider exploring the attitudes and perceptions of student leaders towards promoting drinking, the extent to which different student-led groups endorse drinking, and the association between membership to these groups and drinking behaviour. This could help to inform future strategies or interventions aimed at reducing how much students' drink.

5.4.5 Abstainers' experiences

There is a dearth of evidence relating to abstainers' experiences of non-drinking at university, so insights into this subgroup of the student population adds evidence to their experience and the importance of being acknowledged in any work to tackle the alcohol culture at universities. Findings showed that the abstainers group was not a homogenous one, with different experiences and views on drinking. Some found the abundance of drinking-focused events and emphasis of peers to get drunk during freshers' week and beyond acted as a barrier to social integration. Similar findings were observed in a recent study exploring the experiences of eight female undergraduate students in their first year of

university (153). The participants in this sample too found that opportunities for abstainers to socialise at university were scarce, particularly during freshers' week, due to the dearth of non-drinking focused opportunities and consequently felt socially excluded. All found it difficult to make friends and experienced social stigma or peer pressure to drink. Conversely, although a couple of abstainers in the present study felt pressured to drink, they were considered to be minor, infrequent occurrences. However, some reported that they began drinking, albeit lightly, in order to fit in with their peers. It could be that they felt an underlying pressure to start drinking socially even though they did not reveal that explicitly.

The findings of the present study also showed that feelings of social isolation were not felt by all, nor were they limited to females, as the authors of the aforementioned study proposed. In a US study of twelve college students who abstain from alcohol, Proakis-Stone et al. (225) also observed that some students found the transition to university and making friends difficult, whereas others did not as they found themselves among peers within their accommodation or course with similar interests, cultures and values. This highlights the importance of access to social networks with similar cultures and values at the beginning of university. Jacobs et al. (153) concluded that there is a need for improved access to alternative events for non-drinkers, particularly during freshers' week. Likewise, in Proakis-Stone, students reported that the college culture did not adequately accommodate non-drinking and opportunities to socialise with a focus away from drinking (but not necessarily excluding it) were needed. Findings from the present study show that although alternative arrangements to nightclub events were provided during freshers' week, there was a lack of awareness and access to them, which concords with these proposals. Promotion of and better access to alternative events could not only help towards reducing the prominence of

the drinking culture at this university but also reduce segregation between abstainers and drinkers (153) and reduce the risk of social isolation among non-drinkers.

5.4.6 Awareness raising

Many students did not consider their drinking behaviour to be a problem at any point in the year or take into account the health implications of their drinking, mainly being concerned with adverse social consequences although not even these were of concern to some. This coincided with a lack of awareness of the UK drinking guidelines and how their behaviour related to the guidelines. They also did not consider their drinking behaviour to be excessive as they were able to stay in control. These views are compatible with those from studies at other UK universities (132, 136); Davies et al. (226) reported that students distance themselves from being a 'bad' drinker that exhibits anti-social behaviour and view themselves as being able to stay in control and have fun when drinking, which may help to explain why some health messages fail to change drinking behaviour. Further, other studies with students in the UK have also found they do not consider their drinking pattern to be one that continues past university and so health consequences are not of great concern. It is proposed that university is seen as a 'time out' where adulthood has not yet been reached and so students allow themselves to enjoy riskier activities, such as binge drinking (227). Merrill et al. (83) also argued that this transitional period into adulthood is characterised by 'biased optimism' of the future and so negative consequences attached to drinking are side-lined and effects of drinking behaviour at this time in the long-term are not considered (109, 110). This suggests that any alcohol education at university should consider focusing on challenging the misperception that binge drinking is not a 'normal' or 'moderate' drinking behaviour that does not persist past university life, comparing students' drinking behaviour

to the UK drinking guidelines, and highlighting how their drinking behaviour now can have health consequences in the short-and long-term.

Many students, however, rejected alcohol education as an effective means of reducing their alcohol intake, because they were adults able to make their own decisions or mistakes and had already established a drinking pattern but not (yet) experienced harm associated with drinking to excess. As discussed above, the sociability of drinking was also considered to be of great importance particularly at the point of transition to university. In British culture, alcohol use is normalised and widely accepted, and the students' in this study expected that getting drunk was seen as an intrinsic part of the university environment, which many then experienced. These findings are echoed by Brown & Murphy (154), who then proposed that educative approaches which simply encourage moderation are likely to be rejected on these bases with students' interpreting it as reminiscent of school. They argue that the encouragement of moderation in alcohol education contrasts with students' understanding of alcohol as a useful social practice and it being a part of university life, and suggests that there is little desire to change behaviour from getting drunk to drinking in moderation.

It is possible then that the timing of such an approach may be important, particularly given the finding that students' had inherent expectations of drinking heavily prior to university, and any attempt to change perceptions of drinking and drinking at university should come prior to this time. Brown & Murphy (154) argued that alcohol education should instead focus upon reducing harm rather than prevention, such as the provision of safe transport home on student club nights, which was seen as more acceptable by students and stakeholders in that study. However, this involves redefining goals of addressing problematic alcohol consumption from reducing consumption to reducing harm caused by excessive alcohol

consumption. Although the findings of this current study concur with others regarding students' perceptions of alcohol education, it also draws attention to opportunities to take a different approach to student drinking within the university environment. The social environment and drinking culture changed dramatically for students upon arrival to university with an imbalance in the number of, and emphasis on, drinking and non-drinking focused opportunities. Many students wanted more non-drinking focused social opportunities and not all felt getting drunk was a good way to bond, which suggests that there is a desire for cultural change and that attempts to address the social drinking environment could be an acceptable approach to student drinking. Rather than reverting to managing the adverse social consequences that have been documented previously (132) and do not tackle the root cause of drinking, associated health consequences, nor the impact upon abstainers, subject to evaluation this is a potential opportunity that takes both a preventative and inclusive approach to reducing problematic alcohol consumption at university.

Further, as students perceived that their peers wanted to socialise at nightclubs and drink heavily during much of freshers' week, and considered that their peers typically drank more and more often than they did, interventions that aim to challenge students misperceptions of how much peers drink and how much peers approve of heavy drinking may then be successful, but may also wish to look at challenging students' perceptions of how peers wish to socialise, and highlight what the university social environment can offer beyond drinking-focused events.

5.4.7 Strengths and limitations

This is the first detailed qualitative research to investigate experiences with alcohol prior to and across the first year of university with both drinking and abstaining students. The sample was from a single university, randomised from a self-selecting group who had already participated in an online survey, and so their views may differ to those who did not take part in the survey or volunteer for this additional study. However, a large number of students volunteered to take part and participants were randomly sampled within their groupings in an effort to reduce this. Participants were selected using a maximum variation sampling technique, according to gender and drinking status. Other characteristics, such as ethnicity and type of accommodation, could also have been included in this sampling technique, however, the author was mindful not to extend this too far to ensure that the aim of the study could be met. A more detailed study paying attention to other characteristics in future would be a valid extension to this study.

The first interview which captured students' perceptions of and experiences relating to alcohol prior to university took place after students had joined university and experienced freshers' week. It is possible that this affected students' perceptions of drinking and ability to recall experiences in the year prior to university, however, interviews took place no more than two weeks after freshers' week in an effort to minimise this. If students had been interviewed prior to freshers' week, these would have taken place by telephone, which may have had a negative effect on the initial rapport between the interviewer and interviewee, and limited the richness of the data.

There were several students who did not complete all three interviews. It is possible that their views and experiences with alcohol and the drinking culture may have differed to those

who remained, or may have affected their decision to continue in the study. The emergence of common themes across the interviewees and time-points makes it likely that a complete a picture as possible was gained from this group of students and increases the likelihood that they represent the view of incoming first year university students. It was also not possible to present the views of students with limited English who may come from cultures with a different view on alcohol and may have experienced university differently to the participants in this study.

The use of semi-structured interviews allowed the exploration of students' views and experiences without being too rigid and enabled students to express their views freely. It is important to note, however, that no research interview is a completely open forum for free dialogue between the researcher and interviewee, a power imbalance exists between the two whereby the latter is 'ruled' by the former to provide information based upon the researcher's agenda (3). It is therefore important to ensure that steps are taken to encourage the interviewee to feel comfortable enough to be open and accurate in what they share. This was certainly of importance in this study, with the researcher being a postgraduate student and interviewees as first year undergraduates leaving home for the first time and entering into a new environment, which may have impacted upon their participation and openness. Additionally, given the topic of the discussions was their own drinking behaviour it is possible that some of the drinkers may have played down the extent to which alcohol was a part of their lives or the negative consequences they had experienced. With that in mind, the researcher adopted a warm, friendly and non-judgemental stance towards participants during the recruitment and data collection process. Informal conversations prior to each interview allowed the participants to relax and feel welcomed into the research process. Interviews were also conducted in a private room or

over the telephone to encourage students to feel comfortable to relay their own opinions without feeling judged by others. Due to the longitudinal nature of this study, it was important to maintain a good relationship with the students, and so important aspects of the students' lives such as their university course and personal interests were noted by the researcher and followed up at each time point. This approach was particularly important in facilitating the telephone interviews at the second and third time points.

Telephone interviews were the primary mode of data collection for the second and third surveys. Novick undertook a review of the literature on telephone versus face-to-face interviewing (228), exploring the general assumptions that the former are inferior to the latter, lacking the means to establish a rapport with participants, the inability to probe and potentially for a participant to misrepresent themselves to the researcher. They reported that there was no evidence to suggest that these problems arose, with past studies reporting that researchers who make use of telephone interviews are able to elicit rich data sets (229, 230). Further, as described above, a rapport was established with all participants during the first interview and participants were given the opportunity to choose their preferred mode of interview at the second and third time points, so it is likely that they chose the one that they felt most comfortable with. The length of interviews and richness of the data collected at each time point gives an indication of the suitability of both modes of data collection with a student population.

Data analysis was conducted rigorously and systematically; the use of the Framework Approach (219) allowed the researcher to not only manage the large volume of data generated across 78 interviews, but also compare and contrast participants' views and experience within and between the subgroups (drinkers/abstainers, males/females) and

across the time points. Verification of themes from a senior researcher minimised researcher subjectivity in the coding and enhances the credibility and validity of the findings (173). Given the large volumes of data generated across 75 interviews, a case study of one drinker and one abstainer were embedded into the findings of this study to better illustrate within-person changes in drinking experiences in the transition to university and across the first academic year. As illustrated in the main results, there were a range of experiences within the sample across the year that may not be wholly represented by these case studies, however, together they serve to demonstrate the increased presence of alcohol in their social environment, the sustained emphasis on drinking when socialising at university across the year and how drinking behaviour changes upon arrival to university.

5.5 Conclusions

Students came to university with pre-existing expectations that drinking heavily would be an integral part of the student experience and socialising, during freshers' week and beyond; many also came with existing binge drinking habits. Socialising during freshers' week was centralised around heavy drinking for some but not all, with the provision of daily nightclub events by the SU which received greater attention over non-drinking focused opportunities. Drinking was considered to aid socialising for some but not all of the drinkers, and several abstainers reported feeling excluded due to the emphasis on it. The nature of socialising and students' engagement with the drinking culture remained largely similar across the year, although more non-drinking focused social opportunities did arise during term-time. Both of these were driven by student-led groups which highlights their influence over the university social environment. Many abstainers and drinkers highlighted a need for there to be less emphasis on drinking throughout the year, which suggests there are opportunities to alter

the social environment at universities to best meet the needs of both drinking and abstaining students. The next chapter builds on these findings by considering staffs' views on student drinking, ways in which it has been addressed at the University, and the need and opportunities to address student drinking in the future.

6 University staff perceptions towards addressing student drinking

6.1 Introduction

Outside of the student population, universities are multifaceted systems divided into several academic departments, schools or faculties as well as residential living, a Students' Union (SU), Student Services and recreational facilities. When attempting to understand students' experiences with alcohol as they transition into this environment, it is important to consider the role of the various staff who will inevitably have an impact upon the university drinking environment that was discussed in the previous chapter.

Findings from the SU survey and student interviews presented in Chapters 4 and 5 highlighted that many students came to university with an established binge drinking pattern and view that getting drunk was acceptable. However, alcohol became more of a prominent feature in many students' social lives upon arrival to university, with many appearing to binge drink more frequently, which continued throughout the year. This in part appeared to be driven by their predetermined expectations of the drinking culture as well as the provision of daily night club events during freshers' week by the SU, and by a continued emphasis on drinking when socialising from student-led groups and continued promotion of nightclub events. Despite this, several of the drinkers and abstainers felt there should be more focus on the non-drinking socialising opportunities throughout the year.

Staff at the university and SU whose role is concerned with student experience and who have influence over policies and/or programmes of work will inevitably impact students' drinking

experiences at university. It is important to understand their views on this topic as well as any prior, current or future work that is underway to address student drinking as it will help to shape ways in which this could be done in the future. Previous studies which have qualitatively explored student drinking behaviour in the UK and incorporated interviews with staff and other stakeholders have included a range of different individuals. The 2010 Student Choices and Alcohol Matters (SCAM) report interviewed 29 individuals from academic and support departments at a University, its partner colleges, a representative from the SU and other organisations with the local community (136). Those exclusively involving university staff have included a 2014 study exploring the views of nine members of staff within the SU, halls of residences and student services (132); and the most recent in 2016 included 17 members of staff involved in the development of alcohol policies or awareness activities (154).

These studies reported that stakeholders recognised the potential physical, mental and social harms of excessive alcohol consumption on students and those around them, including non-drinkers (132, 136). They all reported efforts to manage student drinking, either through addressing the adverse social consequences that come as a result of binge drinking e.g. providing safe transportation home from student club nights (132, 136), or raising awareness of the mental, physical and safety risks of drinking (136, 154). Some also described how they supported students with alcohol dependence, referring to specialist external services (136).

There were contrasting stakeholder views between these studies on changing the strong cultural associations with drinking at university and, in fact, whether it could be done at all. Access to alcohol-free socialising during freshers' week and across the term was felt to be an important step by the staff in Taylor (132) and SCAM (136). Those who had created an

exclusively alcohol-free cafe (136) reported difficulties in making this financially viable and began serving alcohol. Encouraging a culture of moderation was also felt to be important by those in SCAM, but they were unsure of how to achieve this. Conversely, staff interviewed in Brown (154) had limited support for approaches beyond educational awareness. This was namely in relation to interventionist approaches that limited alcohol sales or alcohol consumption within halls of residences, which were not considered acceptable within the staff-student relationship. The option of adapting the social environment was not raised. They also felt it unlikely that an SU would be involved in addressing excessive alcohol consumption, for example, carrying out any awareness raising activities, as they had an economic imperative to make sales from alcohol. This was reported by those outside of the SU, however, and the views of the two participants representing the SU were not made clear. In fact, all the studies described above have lacked representation from those working across a Students' Union. They are likely to have the largest influence over a university's social environment, including freshers' week (1), with a remit over the student experience and in managing the many student-led sports clubs and societies that reside within universities. Given this, and the contrasting and limited number of reports of staff at university, further investigation is warranted to add to existing knowledge as well as aid the author in developing recommendations to the University included within this thesis on opportunities to address student alcohol consumption.

The aim of this chapter was to therefore explore staff views on this topic at this university and their priorities in relation to student drinking. The specific objectives were to explore: (1) staff views on the student drinking culture; (2) ways in which student drinking has been addressed at the university; and (3) staff views on the need and opportunities to address student drinking in the future.

6.2 Methods

6.2.1 Study design and participants

This study comprised semi-structured interviews with staff who had a role in student experience and wellbeing at the University. Previous studies interviewing staff and other stakeholders at a single university have recruited between 16 (132) and 29 participants (136). Considering the time and resources available it was felt that 20 participants representing a variety of staff across the university would be sufficient in order to collect a breadth of data, rather than attempt to reach saturation. A purposive sampling with snowballing technique was used to recruit participants who had the relevant experience and understanding of student drinking (3). Known contacts within the institution were firstly asked to recommend staff members whose role was associated with student welfare or student experience. During the research interviews participants were then asked to recommend any further staff members. Recommendations were followed up if they did not duplicate or match the role(s) of those who had already participated.

6.2.2 Interview process

Due to the diverse nature of the participants' roles, it was necessary for the interviews to be accessible and applicable across the board. A semi-structured interview guide with open-ended questions was developed, giving enough structure to capture the key topics across all interviews but allowing for flexibility in order to follow up issues relevant to the individuals' area of speciality. The interview guide (**Appendix 8.17**) was drafted to draw upon the findings from the longitudinal qualitative interviews with students, which allowed the interviewer to follow up on any areas of interest. Interviews covered the staffs' job role and

interaction with students, their views on student drinking and the social environment of the university, what has been done to address student drinking at the university, how they think this could be addressed further, and whose responsibility it is to address student drinking. The majority of the interviews were conducted one-to-one, however, where there were several participants with a similar job role e.g. the two members of staff who supported student-led sports clubs, they were interviewed together.

Participants were contacted via e-mail by A.F. and invited to take part in a face-to-face interview at their place of work and at a time convenient to them. At this stage, participants were provided with a participant information sheet (**Appendix 8.18**) which outlined the research aims and what the study involved. They were sent a follow-up email one week after initial contact if they had not yet responded. Out of the 19 staff reached across the university, two were not able to take part within the study period due to time constraints. These were from health centre and halls of residences services (although others from both of these areas were included). In addition, no response was received from anyone within the counselling service. Before each interview began, it was explained to participants that their responses would remain confidential, they would not be identified in any way, and that they had the right to withdraw at any time. They were also given the opportunity to ask any questions regarding the interview and study. Written informed consent was then obtained. No incentives were offered to staff for taking part in this study.

All interviews were conducted by A.F. in a private room at the University, except for one telephone interview which was conducted from a private room at the City Hospital, Nottingham. After the final interview, with the exception of staff in those roles who did not respond or could not take part, it was felt that the breadth of expertise across the university

was reached and no further participants were invited to take part in the study. Interviews lasted 48 minutes on average (range 22 to 68 minutes). All interviews were digitally audio-recorded to aid transcription.

6.2.3 Analysis

The digital audio recordings generated from the interviews were transcribed verbatim, either by author A.F. or an external transcriber (identified through the online administrative service, People per Hour®). The transcripts were then checked for accuracy and any personal identifiers were removed. Prior to transcription, each staff member was assigned a unique code that identified whether they were from the University or SU and a participant number e.g. SU1. Data were then analysed using thematic analysis following the steps outlined in Braun and Clarke (231), this being an approach which allows the researcher to search for themes and patterns across an entire data set, rather than within individual interviews (such as case-study forms of analysis e.g. narrative analysis). The coding process of thematic analysis is common to many qualitative methods (232). However, Braun and Clarke argued that it 'should be considered a method in its own right' (page 4), as it is a flexible and useful research tool, aiding researchers in providing a rich, detailed and complex account of social phenomena. There are additional strengths to other analysis techniques that follow the similar coding process of thematic analysis, such as the Framework Approach (as discussed in **Chapter 5**). However, considering the breadth and number of participants included in this study, it was deemed that thematic analysis would be suitable in allowing the researcher to move back and forth across the dataset to generate a coherent account.

An inductive approach was taken to analysis, so that the themes identified were grounded in and remained true to the data (222, 231). Transcription by the researcher acted as an initial

step to familiarisation with the data. The remaining transcripts were then read and re-read thoroughly to become immersed in the data. A sample of five interviews spanning the range of staff roles was selected and examined separately by supervisor R.M. Initial ideas were noted and used to create preliminary codes independently. These codes were grouped into potential themes to create an initial analytical framework which was discussed between the researchers, any discrepancies were discussed and changes in the themes were made. Following agreement of the analytical framework, this was applied to the remaining transcripts.

6.2.4 Ethical approval

This study was granted ethical approval by the Faculty of Medicine & Health Sciences Research Ethics Committee at the University of Nottingham (reference number: B14062016 SoM EPD). All personal data obtained by the researcher were kept in strict confidentiality on a password-protected computer and were only accessible to the researcher. The use of the unique ID code allowed participants to remain anonymous to anyone other than the researcher, and all personal data linked to their codes were kept on a database separate from other study documentation

6.3 Results

In total, 12 individual, paired and group interviews, comprising 16 participants, were conducted. The staffs' roles at the university spanned the Students' Union, Health Centre, Student Services, Student Accommodation, Sports and University Administration, and ranged from student facing to higher management roles (Table 6.1).

Table 6.1 Characteristics of staff interviewed

Interview	Role*	Organisation	Gender	Number of participants
1	Overseeing student-led societies	Students' Union	Female	1
2	Welcome week supervisor	Students' Union	Male	1
3	Overseeing hall of residences student representatives	Students' Union	Male	1
4	Senior management role in student experience	University	Male	1
5	Overseeing organisation of student-led events	Students' Union	Mixed	4
6	Health promotion	University	Female	1
7	Senior management role in student welfare	University	Female	1
8	Student-facing role in student welfare	University	Female	1
9	Senior management role in student administration	University	Male	1
10	Overseeing student-led sports clubs	Students' Union	Female	2
11	Former Students' Union welfare representative	Students' Union	Female	1
12	Hall Warden and overseeing off-campus affairs	University	Female	1

*Exact job titles have been omitted to preserve anonymity

Five main themes were identified and interpreted within the data (Table 6.2): 1) perceptions of the student drinking culture; 2) alcohol-related policy and strategy; 3) raising awareness of alcohol consumption at the university; 4) the social environment and alcohol; 5) responsibility to shape the university drinking culture.

Table 6.2 Themes and corresponding sub-themes – staff interviews

Themes	Sub-themes
Perception of the student drinking culture	– *Students' expectations of university* – *Nature of student drinking* – *Student-led groups* – *Impact of student drinking*
Alcohol-related policy or strategy	
Raising awareness of alcohol consumption at the university	– *Existing or past campaigns* – *Planned campaigns*
The social environment and alcohol	– *Events and social opportunities* – *Work to reduce problematic alcohol consumption:* *i. Rebranding of freshers' week;* *ii. Regulating events run by student-led groups;* *iii. Student leader training;* *iv. Initiatives to promote student safety when drinking;* *v. Supporting students with alcohol problems*
Responsibility to shape the university drinking culture	– *Whose responsibility is it* – *Barriers to changing drinking culture*

6.3.1 Perception of the student drinking culture

6.3.1.1 Students' expectations of university

Many stakeholders felt that a lot of students believed that binge drinking and getting drunk was intrinsic to the university culture and that they came to university with an expectation to go clubbing and drink heavily, particularly during freshers' week. One respondent claimed that this was not from messages put out by the University or SU.

> *This year, on social media on Facebook they came ready to drink…they all came ready and none of that came from the Students' Union. It wasn't coming from the student's [union], it wasn't coming from the halls or from us it was what students came with and that is a worry.* UNI3

Some felt that students drank to gain confidence in their first social situations with new friends or because it is considered to be normal behaviour at university and in society. One staff member highlighted that students coming to university are faced with rebuilding their social identity and that their perceptions about the university drinking culture (reported above) could lead some students to use drinking as a way to create this new identity.

> *So you have students who arrive at university and what's their perception of what they need to be, so how much when you come to university do you use that as an opportunity to reset your identity, both to yourself and to others? Part of that might be about your drinking behaviour… people then feel they have to be something else so they arrive at university having been told by the whole of their culture 'being a student is about waking up at lunch time with a massive hang over because you been out all night' … you have some others who are saying 'maybe that's who I am and maybe that's what need to be and how do I get into that'. That's how I see the picture.* UNI1

6.3.1.2 Nature of student drinking

All staff members spoke of a prevalent student drinking culture which predominantly featured binge drinking. They said it was considered a "*fundamental part of student life*" (UNI5), seen throughout the year but is more prominent during "*the start of the year, the welcome, the first month and the last few weeks in particular"* (SU4). They did, however, acknowledge that this is not true of all students. It was felt that there has been a shift to a pre-loading culture among those who did drink in recent years; respondents believed that students did this to counter the high cost of drinks at nightclubs and as a result would drink a lot in a short space of time. Some felt that this was counterintuitive, however, as they considered that students would then go on to spend a lot of money in a nightclub because they were drunk. In addition, staff also noted a shift to drinking different types of alcohol,

from lower strength alcoholic drinks to spirits and shots – a way to get drunk quicker and cheaper.

> *Its focus is about drinking a lot in a short space of time and then the reality is that often, because it's cheaper than when you go out to the clubs, but the reality is that you're more likely to carry on drinking aren't you?* UNI2

> *We are in a culture where shot drinking, drinking shorts, Jaeger Bombs, all of that drinking and drinking very quickly.* UNI3

Many expressed concern over the nature of student drinking and also felt there were pockets of students for whom "*their use and abuse of alcohol is highly problematic*" (UNI1). They acknowledged this was not true for all students and were aware there were many abstainers at university as well as those who "*weren't comfortable*" (SU6) with the predominance of drinking in student culture. Some also noted that drinking heavily or abstaining from alcohol was not necessarily limited to certain groups and there was heterogeneity within subgroups of the population e.g. between sport clubs and international students.

> *This is the thing, there is a huge cultural element for my groups but then at the same time I think it is reductivist to say that international students don't drink … so we have got lots of Hindus - might not drink but at the same time Indian Soc[iety] are party animals, they love it, they're like "Holi is all about drinking and getting drunk", aren't they?* SU4

Despite concerns over the nature of student drinking, a few staff members felt that students who drink are doing so less often than they used to, although still considered it needed attention. They speculated a number of reasons for why this is, including the rise in academic fees and greater academic pressures, more cultural diversity at the university and an increased awareness and interest in health.

> *Yeah, there's been a massive shift in that I would say because when I was a student here it was every single Wednesday. There was no question of, it was every*

> *Wednesday, every Friday and now it's ok for students to say, "Well no, I've got too much work" or "I'm not going out tonight, I'll come to the social but I'm not going out."* SU5

One respondent said that despite the perceived shift in how often and how much students are drinking, this reduction had not happened evenly across the student population, and that there were still student groups who frequently drank to excess and "*amplify*" (UNI1) the drinking culture.

Despite highlighting their concern over the prevalence of binge drinking at the university, some members of staff felt that they lacked understanding on the extent of the issue.

> *I still think it's quite subjective on what is responsible drinking because my idea of responsible drinking might be different to somebody else's responsible drinking.* SU1

> *It's very difficult to get a handle on. I think the visible signs of it are, you might think there isn't actually a problem. Visible data, there isn't a lot that says we've got a massive issue.* UNI5

Several respondents also highlighted that they were aware that a small minority of students come to university with a drinking problem or develop one during these years. They weren't clear on how big a problem this was and a couple disputed whether any students would be classed as having a drinking problem as they felt it was typically seen in older adults.

> *Because most of our students, like everybody else, will go out have a good time, get larey, get loud but then they might not drink then for… you know, they're not an alcoholic they just can't regulate their drink when they go out. I sit on a group and sometimes we get figures that are brought to us and the figures that are brought to us is actually not students who are alcoholics, it's actually an age group, a much older age group.* UNI6

Staff members also highlighted how drinking to excess was not unique to universities or the student experience, as binge drinking is "*socially acceptable*" (UNI4) and deeply embedded

into wider British culture. They also felt there was a general expectation from society for students to drink which was influential in how young adults drink:

> *I think it is society though isn't it, you leave school and go to university at 18 and you are let out by yourself without your parents what are you going to do? Because it is what society tells you, you have to do isn't it?* SU1

> *It's a deeply embedded culture which is in every part of the media, every year this all comes out. The hilarious stuff about freshers' week japes, you know, it's so deeply embedded in the British psyche.* UNI5

6.3.1.3 Student-led groups

Several of the staff referred to their perceived influence of student-led groups on student drinking behaviour, including sport clubs, societies and other committees who organise social events for students throughout the year. They referred to the popularity of drinking games, initiations and events focused on drinking among these groups. Most felt they created a platform for new students to engage in heavy, and sometimes dangerous, drinking, although one felt it was up to individual whether they engaged in with or not.

> *There was their equivalent of a lash bucket and there were drinking games and these drinking games, particularly when you are a new student, you felt like to join in you had to be a part of this.* SU1

> *To be fair as far as I'm aware, the clubs don't provide alcohol or anything like that normally. Every Wednesday, meet at the house, people bring their own booze. It's very much if you're up for it, you come.* SU5

It was acknowledged that not all student-led groups were associated with drinking heavily, but that those who promote drinking within their events do not consider non-drinkers in the planning of social events.

> *I said [to student leaders of the groups] what about people who don't drink and that flummoxed a few of them, quite a few of them.* SU4

Several staff members brought attention to a select few societies who were considered to be particularly problematic, organising regular mass drinking events on- and off-campus which resulted in a lot of anti-social behaviour. It was also highlighted how those groups are a risk for students who have a drinking problem.

> *No bones about it, this is about, so the [events name] were basically sticking a load of students on a bus, taking them to a city where they would do bucket collections and on the way back it was basically getting people as drunk as they could get them … it has been a deep cause of concern.* UNI3

> *That is another risk to our students, students who perhaps have an unhealthy relationship with or are attracted to some of the societies that are heavily associated with alcohol.* UNI3

Some highlighted how the leaders of student-led groups should do more in "*setting a good example*" (UNI4) to younger students by not promoting drinking so heavily and being inclusive of different cultures, which would aid integration of non-drinkers into and reduce the emphasis of drinking in these groups.

> *I think if we had a load of presidents that didn't drink and didn't promote it then we would have this culture in five years' time that actually you don't drink when you play sport, it is just expectation now isn't it.* SU4

6.3.1.4 Impact of student drinking

When asked about how they felt drinking impacts students at the university, safety was highlighted as the main concern by the majority of respondents. This encompassed a range of issues including not being able to get home safely from a night out, being at increased risk of injury due to the individuals own misdemeanours, being physically assaulted (including sexual assault), or being the perpetrator of assault. During freshers' week, a high proportion

of welfare logs (incidences of social disorder, misconduct or harm recorded by the SU) arise out of student drinking.

> *But again it is part of this safety thing, alcohol reduces the safety of students on nights out. That's just a fact. If everybody went there sober it'd be a different scenario.* SU2

> *We would have had approximately 500 welfare logs during that week and I would say that 70% of them arose out of the night time and a lot of that is around getting quite drunk, so not just enjoying themselves but getting quite drunk and that will lead to an accident.* SU1

Several of the respondents also highlighted that anti-social behaviour, namely noise disturbance in the local community or within halls of residence, was common. In the former case, this had involved the police on numerous occasions.

> *We have seen a rise in the number of students having large house parties, bouncers on the door, providing booze for everybody, having a DJ from town come in, which is out of order, the police just come and shut them down.* SU3

Staff also noted the potential for academic performance to be affected by hangovers and missed lectures as well as poorer long-term physical and mental health. Many were concerned about how the drinking culture was excluding of those who chose to not drink, and how it also put pressure on those who did drink to keep up with others.

> *Students who come to university that don't drink who feel socially isolated, students who leave university because they feel there is no place for them because they don't drink.* UNI3

6.3.2 Alcohol-related policy or strategy

Staff members highlighted or acknowledged that apart from there being "*code of discipline*" to regulate student behaviour which is "*often influenced by drinking"* (UNI5), there was no

overarching policy or strategy at the University that focused on student drinking, nor was there an identified individual leading on this issue within the organisation.

> *We don't have a big strategic plan which says "this is what we are doing on alcohol now."* UNI5

> *Whether there is a student policy on alcohol I doubt {it]. Unless I haven't found it in the time I have been here I can't see it and I think that's because the attention hasn't been on it. It's been allowed to be seen as 'oh well, someone else should pick this up' but who that person should be and how that goes across the campus is interesting.* UNI1

A couple drew attention to the University's health promotion specialist who worked towards a health promotion strategy that encompassed student drinking, in the wider context of student health and wellbeing. The health promotion specialist themselves highlighted that the most relevant alcohol strategy they could draw upon was from the "*local [city] alcohol strategy"* (UNI2). It was felt that the lack of policy and joined-up working led to mixed-messages around drinking on campus, *"So we're giving out these messages about not drinking excessively and staying safe and trying to drink within the recommended limits, but then you'd walk past a big pull up banner saying, "Smirnoff, half price", so it's we don't wanna be giving out those mixed messages either"* (ibid).

One staff member within the SU who oversaw student-led activities reported that the organisation had a code of conduct that they could use to guide what type of events they and student-led groups could organise. This stipulated that student leaders must demonstrate that they meet the SU's values of inclusivity, ensuring all students feel able to participate in their activities and that events involving alcohol must involve "*responsible drinking*". Behaviours that may "*bring students into disrepute*" must be avoided. However,

they felt that this policy was too "*subjective"* as it was difficult to judge whether an event was going to involve responsible drinking or not.

> *So in the code of conduct what we have is inclusivity, so student groups need to show that they are adhering to inclusivity by ensuring that those who might not drink alcohol are able to participate.* SU1

Those in higher management at the University highlighted the need for a strategic plan on alcohol, particularly given "*the changing pattern of student drinking behaviour*" (UNI5). They also felt it needed to take a "*global picture*" (UNI1) of the issue, rather than approaching it "*piecemeal*", which is what has been done historically.

> *And as we're having this conversation I'm immediately feeling really, really guilty that we don't have a more focused alcohol-related policy and set plans in terms of a framework because… yeah, we should have.* UNI5

They referred to wanting to bring together the different organisations within the University to work together to address the issue of student drinking effectively, but that they "*are only just starting that conversation"* (UNI1).

6.3.3 Raising awareness of alcohol consumption at the university

6.3.3.1 Existing or past campaigns

Staff discussed that awareness raising around alcohol did take place at the University, and largely came from the University rather than the SU. SU staff highlighted how they in the past had filtered down information and campaigns that came from the University or external groups, but did not create their own. At the University, the health promotion specialist was responsible for raising awareness of health issues. They described how there was a general

health initiative at the University, which covered several areas of student health, including alcohol:

> *Most of my work is done through the [general health initiative] so we have a [initiative] website, we've got information, brochures around the five main themes which is drugs, alcohol and smoking, sexual health, mental health and wellbeing, healthy eating and keeping fit.* UNI2

On the topic of drinking, awareness raising had typically aimed to increase students' understanding of what a unit is and where they can access alcohol services – mainly for those who feel they have a drinking problem. They described how this information was distributed to first year students when they signed up to the health practice during freshers' week. At this point of contact, they are given a drinks calculator (to total up the number of units they had consumed in a given period) and information about accessing alcohol services and other health-related services, such as mental health and sexual health screening. This information was also provided to students in hall of residence 'roadshows' that took place later in the academic year.

> *So, basically the [initiative name] hall road shows is about improving access to services and actually bringing services to students.* UNI2

Outside of this, there were a couple of examples of how staff within a welfare role with the Students' Union or at the University had occasionally done their own awareness raising on issues around alcohol, mainly relating to safety when drinking, but these were not consistent year on year, particularly those created by sabbatical workers at the SU.

6.3.3.2 Planned campaigns

Several respondents discussed two new campaigns that were being planned by the University and were focusing purely on alcohol. The first included the creation of a leaflet

containing information on units and being safe when drinking, which would be distributed just before the Christmas break.

> *So it's about harm minimisation, there's information there about where you can get help and support, there's information about things like the safer taxi scheme, the street pastors, that kind of information, a bit of blurb about the university and the code of discipline and just a bit of information about the recommended unit amounts per week. Yeah, just very general, basic kind of stuff.* UNI2

The second was an initiative around the pre-loading culture aiming to increase students' "*awareness of actually how much they're drinking*" (UNI2) and encourage them to consider drinking less when pre-loading. This campaign would involve the distribution of plastic glasses with alcohol unit information printed on the side, so students could see how many units were in a typical drink that they poured. These would be distributed by welfare officers in each school as well as in hall of residences kitchens as that "*is often where the pre-drinking takes place before they go out*" (UNI2) and would be accompanied by a postcard which instructed them on how to use the glass, plus additional information on "*harm minimisation*" and being safe when drinking.

> *So the idea would be that while they're drinking at home they can think "oh ok", pour as much as you would normally have in the glass that you normally drink and then pour it into here and then you will see how much it is. Then, you know, keep in mind how many units you'd be having.* UNI4

> *I just think people aren't aware and of course, some people are just gonna think, "well it doesn't matter", but some people it might actually think, "well actually binge drinking, I've already had two glasses, I'm about 5 units, I might oh slow down a bit."* UNI2

It was also highlighted how the student body is or could be used to help raise awareness around welfare issues, such as alcohol, at the university. The Junior Common Room (JCR)

representative team, a group of first year students whose role is to provide social opportunities for and represent their fellow students living in university accommodation, includes two welfare officers whose job is to promote any welfare-related campaigns that come from the Students' Union or University.

> *The JCR welfare reps, [I am] really heavily involved in getting them to promote the hall roadshows and supporting them to run any campaigns that they wanted to run in the halls … So any campaigns that the SU would have, they would promote or help them promote it within their halls.* UNI2

A couple of respondents felt that students were an important resource in raising awareness about welfare issues, including drinking.

> *I think it coming from peers as opposed to the University is really positive 'cause students are probably going to be more relatable to that as opposed to the University telling them 'this is how many units you should drink.' If it comes from their peers it's kind of like "oh ok, other people are also considering this, I should probably start looking after myself a bit more now as well." So I think it could have quite a powerful message behind it when it's coming from a group of students.* SU6

Although many members of staff felt that raising awareness on the dangers of excessive drinking was important, it was not the only solution and "*wouldn't eliminate excessive drinking and irresponsible behaviour*" (SU5).

6.3.4 The social environment and alcohol

6.3.4.1 Events and social opportunities

The majority of staff reported that alcohol-focused events, such as club nights and bar crawls, were the most frequent events organised across the university during freshers' week. It was felt among the respondents that there was a surplus of club nights during freshers' week which involved heavy drinking, despite attempts from various people at the university

to reduce the number taking place. In spite of this, it was acknowledged that in the last couple of years more alternatives to drinking events had been organised during freshers' week.

> *There was a lot more diversity in the events that were being offered to students, which meant that it wasn't the case that they had to go on the nights out drinking all the time 'cause there were evening events that they could go to like the cinema or comedy club … But obviously there was still, what five, I think there was a club night every night.* SU6

Despite this, they felt that there was still a "*bias toward the drinking events*" (SU2) in the publicity of freshers' week events and a "*lack of effort*" (SU2) to promote alternative events by the SU, which resulted in students not being aware of alternative events despite wanting to attend them.

> *When you talk to students, the feedback you get is "oh I'd love to have gone to that event." So, it's about publicising it, it's about marketing it better 'cause people wanna go to these events that aren't always the boozy events.* SU2

The recent reduction in the number of club nights (from six to five) during freshers' week was felt to be "*a step in the right direction*" but "*not enough of a change*" (SU1), especially considering that during the latest freshers' week "*the non-club events were all sold out, club events weren't*" (UNI3).

Staff working with student-led groups (societies, sport clubs and JCR reps) also reported how it was typical for many of these groups, but not all, to focus upon drinking when socialising throughout the year.

> *They were just very, very clear about what they were planning to do, differentiate between freshers' and returners, put drinking challenges on, provide alcohol … The bigger clubs and certainly the BUCS (British Universities & Colleges Sport) clubs, so*

> *the clubs that are playing fixtures week in week out, will have socials every Wednesday.* SU5

> *Particularly a lot of bar crawls, [course-based] groups are notorious for bar crawls.* SU4

They felt that some, but not all, had offered alternative events to drinking. Those working with student-led groups also felt that although more were offering alternatives to drinking, they did not necessarily replace drinking events.

> *I know a lot of societies do, you know in the [building] there's an indoor mini golf? And things like that. I think activities like that, the more they do the better, because it's inclusive to everyone. But then it might be that some clubs do a lot more of the drinking activities.* SU6

> *I don't think they're substituting drinking activity I think they're happening in addition to. So say for example you get a regular club like Men's Hockey, they still go on all their Wednesday socials, they're not going to substitute one of those for a mini golf night but they might go to mini golf on Thursday.* SU5

Staff working with societies reported that some would offer other services, such as academic support, welfare or charity weeks, though it was unclear whether they considered such events to be social alternatives to drinking events, or whether the societies that offered these also hosted drinking events.

> *So lots more of them now do peer mentoring sorts of things they do kind of study, [course society] they do a big welfare thing, there is a big deadline in late November where all of the first and second years have to spend pretty much 2 days in a computer room and they just get a load of pizzas delivered to just outside so that people can just go out have a bit of pizza and get back to work without having to go home and have dinner. So lots of them are thinking of things like that now.* SU4

Within halls of residences, a warden said how they typically organised social events during the first semester and were then replaced by JCR reps in second semester. It was evident,

however, that there were differences in the type of social events organised across the different accommodation sites.

> *I will not allow an event to take place where I am Warden that's got any alcohol, I don't sanction them.* UNI6

> *You have your on-campus halls and off-campus halls. Your on-campus halls will often run, because their common rooms can fit a substantial amount or proportion of their students in, they can run things like movie nights, pizza nights … because the space works, whereas off campus you tend to get fewer events but much larger.* SU3

One staff member highlighted how most socials organised by JCR reps were alcohol-focused, however, recent changes to their events supplier (an external company) who could provide a greater variety of events meant they were feeling more hopeful that inclusive, non-drinking events would become the norm in university accommodation.

> *In terms of variety, as has been up until now, it's, there isn't a huge amount in terms of we tend to see alcohol-focused events Our previous supplier didn't understand inclusivity really they just saw the bigger events for the bigger margin and pushed our students towards that. Our new supplier is very much pushing all of the events to create a rounded experience, so we have got them going into halls to do Sushi making classes in the next couple of months, really cool. They will be running cinema evenings around the Oscars that are themed around the Oscars.* SU3

6.3.4.2 Work to reduce problematic alcohol consumption

The participants discussed a variety of ways they have attempted to shape the social environment to improve it for abstainers and reduce problematic drinking at the university. This included rebranding freshers' week, regulating events run by student-led groups, providing training to student leaders, promoting safety when drinking, regulating pricing of

alcohol on campus and introducing a referral programme to a local alcohol charity. Each of these are discussed in turn below:

6.3.4.2.1 Rebranding of freshers' week

The SU chose to rebrand freshers' week, due to *"exposure in the press*" of an incident involving drunk students "*chanting"* discriminatory slurs (UNI3) and a recognition that not all students associated with the drinking culture. The aim of this change was to work towards "*reducing the involvement of alcohol in week one [freshers' week]*" (UNI5). This involved changing the language from 'freshers' week' to 'welcome week' and introducing a more varied and inclusive events programme. A key change was to remove student reps that organised and accompanied first year students to the freshers' week events, "*who were essentially Club 18-30 reps*" (UNI1) and replace them with student mentors who represented a greater diversity of student interests. They were also prevented from promoting drinking-based events and drinking at all during freshers' week events.

> *Also we stipulate, before they used to be mentors they were called reps and it was run very differently and as part of their volunteering and that's how they were allowed two free drinks in every club they were. There is no drinking, how would we handle them. And also how do you manage that they had two drinks. So the mentors aren't to drink alcohol when they are on duty at all … We recruit them and we interview with them and they have to go through a process and we try to make sure that we have a good level. So we have students in there who don't drink and wouldn't want to drink.* SU1

By introducing this rule, one member of staff highlighted how over time this had then become the norm and was one example of how the freshers' week culture was beginning to change.

> *So it's completely out of, to this year, most of these welcome mentors that were recruited wouldn't have even known that previous years' welcome committee could have had a drink. So it's already out now of people's minds that people could drink*

> *as a welcome mentor. They can at [other university in the same city] and when they go out on nights out we see [university] reps and they're drinking because they're absolutely plastered, with students, and that's terrible … So that's part of the inclusive steps forward.* SU2

Overall, it was felt that the rebranding had started to reap beneficial results as staff and student welcome mentors within the SU had embraced it, with a greater diversity of events now on offer, although there was still progress to be made, "*It's not there yet*" (UNI1). Respondents considered that further progress could be made by learning from students in how to create alternative events that are equally as attractive as nightclub events, increasing the exposure of these events which encouraged drinking in moderation rather than "*all or nothing*" (UNI3):

> *There is still a tendency for it to be the clubs or alcohol free events and actually it can be as simple as providing events where if you want to have a pint you can but it is not around the alcohol. It would be good to have messages that also encourage moderation otherwise we are feeding the extremes which we are kind of seeing which is either you don't drink you do other stuff or you go clubbing and get completely and utterly inebriated and all that involves. And actually if we can educate our students that you can go out and have a good night drinking a bit without getting into a complete state that is quite a happy medium really.* UNI3

> *Because people can't conceptualise not drinking, they're like "well what do we do instead?" It's a bit like smoking you can't replace a cigarette with a carrot stick, it's just, it's not replacing it with something, it's just thinking differently about 'what do we do and how do we celebrate things?'* UNI4

6.3.4.2.2 Regulating events run by student-led groups

Staff described a number of rules they had introduced to regulate student-led events and reduce problematic drinking, or the consequences associated with it. This included a banning of initiation ceremonies (a rite of passage ceremony which typically involve humiliating or

abusive rituals, often centralised on the rapid consumption of multiple alcoholic drinks (150)). Some, however, knew they were still taking place in an unofficial capacity.

> *We've stopped all initiations 'cause I used to get those off campus as well, that's all stopped. Any hint of an initiation, we're onto it straight away… If we get wind of one, which I will get wind of it, they're then brought to task.* UNI6

> *The SU took a really brave decision to stop the [event name] and now we are dealing with them underground.* UNI3

Some reported how they had acted to intervene on large alcohol-based events to prevent adverse social consequences, such as anti-social behaviour or noise disturbance in the community.

> *We had a really, really big, big, big event a few years ago in [off campus area] where we had all the [course] society, they were hosting [course] societies from around the country. We went through the plan with a fine toothcomb, our security did all of the stuff that was going to be on campus, I did all the stuff that was going to be off campus. I was out there at 3 o'clock in the morning when all the buses came back and I have to say it went superbly well, with all the measures that we'd actually put into place with the SU and the [course] society and I even had a phone call from one of the residents saying, "did that event go off because I didn't hear a thing?"* UNI6

There was also a recent introduction in university accommodation to prevent JCR reps from subsidising alcohol at their social events, as part of the aim to create a more inclusive social calendar. This was not something that the SU respondents were keen to introduce but it was felt necessary after encouraging JCR reps to provide more inclusive events and it not happening.

> *We have been relying on them to do it based on the training that I was talking about earlier with the education proactivity, but actually we are not seeing much of a change much of a cultural shift and that has been happening for about 4 years so*

> *now is the time to actually take a bit of a bigger step … It feels like we are enforcing a rule, but our hand has been forced in that less than 50% of residents feel like the JCR's actually do something for them and most of the time what comes back is it is because they are drink focused events, they are alcohol focused events and whilst that appeals to just under 50% of our students it is the sort of thing that totally alienates the other 50% as well.* SU3

For sport clubs and societies, respondents from the SU described how they review proposals for events from student leaders. This process aimed to ensure that these groups are "*adhering to inclusivity*" (SU1) and other SU policies, are given support to organise the event and for the SU to risk assess and ensure the events could be insured. One way of demonstrating they were adhering to inclusivity values were to demonstrate that the event was inclusive to non-drinkers, so they were able to refuse an event if there was a clear focus on drink. It was acknowledged, however, that their power to prevent certain events going ahead was limited, particularly as the student leaders could organise a social event outside of the events process or just not mention drinking on the form:

> *We can't know what we don't know, so we have to work with what they are telling us.* SU4

> *We have another event that was called Port and Policy and we were like "no because that makes it focus on drink", so we have asked groups to change names of events, so they are not focused around alcohol, but the groups will say everyone still knows that it is.* SU4

It was also clear that some student leaders did not know how to create a truly inclusive event. The following quote is taken from two participants in the SU4 group interview:

> *Respondent A: Sometimes they think something being really inclusive is the fact that there is non-alcoholic options, and anyone can go.*

> *Respondent B: "We are not going to say these people can't come." That is what they think inclusive means.*

Furthermore, making sure that non-drinkers were included in an event was not actually deemed to be an essential component of an inclusive event, and there were other ways student leaders could demonstrate this. Again, this quote is taking from two participants in the SU4 group interview:

> *Respondent A: if they are going by bus somewhere and they have organised a specific bus for people impaired mobility issues or something like that then that is thinking a little bit more about it.*
>
> *Respondent B: That is thinking outside the box a bit more and that takes it to accessibility and inclusivity that way.*

Within the sport clubs, the events approval process was taken one step further in the 2017/18 academic year (a year after the student interviews took place), by introducing "*additional workshops around initiations"* (SU4). Sport club leaders were expected to attend these workshops at the start of the academic year, which reminded students of how the SU expected them to behave and involved them filling out an events form "*detailing what their welcome party event was going to entail"* (SU4). The aim was to encourage students to consider the following: "*are we being inclusive, are we providing options for people that don't drink, are we providing ways for people that do drink too much to get home?"* (SU4). As a result of this, staff members who worked with sport clubs reported that there were less investigations into and sanctions placed on sport clubs as a result of drinking. They did, however, acknowledge that the student leaders of sport clubs may have still gone ahead with initiations and that the reduction in investigations and sanctions could be due to student leaders "*knowing that loads of sports clubs got investigated and sanctions did get*

put it place" in the previous years, so were "*better at covering them knowing then the consequences*" (SU5).

> *They probably think, "It's a waste of time in some respect because we just put on the form the stuff we knew that we had to, to get by, and then we did a totally different event on a totally different date to what we stated on the form."* SU5

6.3.4.2.3 Student leader training

Several staff members discussed the type of training that student leaders received in relation to drinking. All student leaders received training on their role, how to organise events and were encouraged to make sure the events they ran were inclusive and accessible to different types of students. It was unclear from the interviews the extent to which creating an inclusive event was covered with the different student leader groups, as each group had their training delivered by different members of staff. Those working with sport clubs described in more detail how in sport leader training they "*discuss the initiation culture*" (SU5) and upholding the Universities reputation when on and off campus. Several also discussed how some student leaders received 'bystander training' which encouraged them to "*observe situations from afar or from near and the points you could intervene and stop it escalating*" (SU1). For welcome committee members the focus was on sexual assault, but for sports it was adapted to discuss drinking behaviour.

> *We used the bystander initiative to talk about alcohol and translate it into what does a good mate do, what does a good society do, how do you support friends who are drinking too much or are being pressured to drink whatever and getting them to think about that.* UNI3

A key aim of training across the board was not to stop students from drinking but to make students aware of how their actions may affect others and to respect people's decision to not drink.

> *But in fact, when you say it's absolutely fine for someone to have one drink and not go out and they're still just as worthy and just as good a club member as anyone else is if they stay out till 6am, do you know what I mean?* SU5

One respondent also described an optional training session on culture shock they offered to students who lead societies and JCR committees. This covered in detail ways for student leaders to be sympathetic and inclusive to those from different cultures. It was felt that it would be possible to adapt this training so that drinking behaviour was included and that it should be open to more student leaders.

> *…40/50 people that go for it, it is not very many it is 10 a session and I run 5 sessions a year. But then we also do it for mentors which is maybe about 200 students that go through that and then halls which is about 100, so there is people that go through it, but I do think it could be utilised a lot more.* SU4

6.3.4.2.4 Initiatives to promote student safety when drinking

Several staff members highlighted how there are a number of schemes to increase student safety when drunk, to avoid any adverse social consequences on the night. This include a safe taxi scheme, which allowed students to get home if they had no money.

> *It's publicised to students in the first week back, they can get home without having any cash on them, safely and so for free and they'll give the taxi driver their SU number and then they give that to the union and then they charge the union and then the union pays the taxi driver and then I [they] will have to pay the union the next day for the fare home.* SU2

Also included in this was a street pastors-style scheme where student volunteers patrol the town centre on the student nights to help them in the event of any trouble. One staff member also described how they had endorsed the introduction of the 'club crew' initiative, which similarly supported students in trouble but inside nightclubs. It was felt that these

schemes worked well to increase the safety of students when drinking, however, one believed that the safe taxi scheme was not functioning as intended.

> *But yeah, this year there were incidents because I was close to the welcome committee, that the safe taxi scheme didn't work, it's not working, the cab drivers aren't accepting it so there's an education thing on the [taxi service] end as well, they don't know about it or they're not doing it … it's not acceptable.* SU2

6.3.4.2.5 Supporting students with alcohol problems

Several of the participants described how there was also support for students who may be struggling with their alcohol consumption. This included a welfare support network that ran from halls of residences, as well as personal tutors and welfare officers within academic schools, who had received training on how to support students "*that might be drinking and struggling*" (UNI2). This could include students who are feeling under pressure to drink by their peers or those who are exhibiting signs of alcohol dependence. They also highlighted how the University had recently connected with a local alcohol charity and would refer students to this service if they felt they were having problems with alcohol.

> *If a student was struggling with alcohol we would talk to them about it and encourage them to use that support and we can refer them.* UNI3

In an effort to curb anti-social behaviour as a result of drinking, this service was also used within a pilot programme whereby students who had got into trouble within their hall of residence when drunk would be referred.

> *And we work really closely with [alcohol charity] and they provide a service at [health centre] and in the past we did a trial with them where it was based in two halls and basically students got their fine reduced, so if they were, if there was a bit of anti-social behaviour for example, so I think as it stands they get fined but the idea behind this was that if they went and accessed support through [alcohol*

charity] they would get a reduction in their fine. So it just meant we were aware that they were getting information about safe drinking. UNI2

Referral to the support service was considered to a good way to deal with the cause of anti-social behaviour and, despite no formal measures of success, a successful programme at raising awareness among those referred, of how much they were drinking. It had been recently commissioned as a permanent service at the University.

What we are hearing is they are coming back and going "I didn't realise what an idiot I was, actually everyone else did stop drinking at midnight and I just kept going and going and going till 3am on Monday, Wednesday, Thursday and Saturday, every month for all of first year." I genuinely spoke to a student who said that, and they went "it was only when I went to see these people that I realised what I was doing wasn't normal". SU3

That was a very creative approach, but other more traditional wardens who have done their job for a very long time would just fine them … because they haven't actually dealt with the cause of the problem and then they will just kick them out. SU3

6.3.5 Responsibility to shape the university drinking culture

6.3.5.1.1 Whose responsibility is it

Both the SU and University felt they had a responsibility to address problematic drinking and the university drinking culture to ensure students were safe, and to promote responsible drinking, which as evidenced above they had taken steps to do so. Several discussed how it was important for the University going forward to focus attention on the cause (reducing problematic alcohol consumption) rather than the consequences.

Let's stop, just stop and stop firefighting because that's what we're doing. We need to treat, if we can treat the cause there's no need for treating all these symptoms because half of them aren't gonna be there. UNI6

It was felt that their responsibility going forward was to not only do this but also provide students with the opportunity to act responsibly with alcohol and lead on making sensible choices.

> *Ensuring that students are thinking about their own wellbeing and are taking steps to look after themselves as well … Again to ensure that they are able to make the most out of the opportunities that they are presented with.* UNI5

> *We are doing a lot of work but ultimately it is how far do you go, how prescriptive do you go and how student led is it, because you could just walk in and go let's just breathalyse everybody before they get in their car and we could do that, we could afford that to be honest, but is that the point of what we are trying to achieve or actually is it a balancing act between we want our student's to lead on this and to understand what the issue is.* SU3

It was felt by all participants that the University and SU should therefore take responsibility in creating an environment that was inclusive and accommodating to the diverse student population, and to provide and promote a diversity of social opportunities outside of drinking so that drinking heavily is not felt to be the main means of socialising and fitting in.

> *I think the University have a moral duty to actually show the students there are other ways of enjoying yourself, and the SU very much so, other than just drinking. Hence that's why over the years we have pushed and pushed and pushed.* UNI6

> *I think there is a wider cultural part, the bit that universities can play is the reiteration of those messages, it's the saying 'you can do all of these things'. It's not demonising the people who want to go out and drink, it's obviously being clear about the impact on people's health and also the risky behaviours that come from excessive alcohol consumption … but it's about opening the opportunities of lots of different activities and saying all of this is good. It doesn't mean you are not one of the cool kids if you don't want to go and have this lifestyle and breaking down that culture internally.* UNI1

Members of staff from both the University and SU agreed that they needed to work together in the future, on promoting responsible drinking and creating an inclusive social environment, in order to provide a more consistent message to students.

> *And I think what would be great is, and I've talked a lot about this, is basically we have a joint three-year plan and we have in that plan a calendar of events and campaigns that we do jointly so we pool our resources and we're singing from the same hymn-sheet.* UNI2

> *Sport is an example of this, where the universities generate a lot more activity in sport, where a lot of resourcing goes into a new building, beefing up the leadership team, bringing in some very capable individuals who are now beginning to progress different angles. But you start to look at 'ok, well how does that then link how does the recreational side of this, the non-competitive sort of engagement side, link to something like health promotion' and that connection between those things rather than thinking I'll take a health promotions worker and get them to tell them not to drink too much. What more can we do here?* UNI1

Staff within the university felt they have had to push the SU on this agenda in the past, although acknowledged it had been more proactive in the last three years.

> *You still have a freshers' week or a week one which has a significant alcohol input, although the University has worked very hard… Students' Union have been slower to catch up, the University has worked very hard to downplay that, particularly given the larger percentages of non-drinking students we do have.* UNI5

Many also emphasised how universities were only a part of the picture when it came to changing the culture of drinking and that "*it's got to come from a wider societal change*" (UNI4). Issues that they felt needed to be addressed were how the student experience was reinforced in wider culture, how responsible drinking was promoted, and how alcohol is priced and marketed both locally to students and in the UK.

6.3.5.1.2 Barriers to changing drinking culture

A number of barriers to changing the university drinking culture were identified across the participants. As highlighted in the *social environment and alcohol* theme, several reported that they wanted to reduce the involvement of club nights in freshers' week. However, many also highlighted how these events brought money into the SU, which is then used to fund other services such as subsidising alternative events which do not generate a profit.

> *Our club nights are probably, they generate profit which if they didn't generate profit wouldn't be able to do all the other stuff that we did during the week, there's no two ways about it. You know that we can put on things that either very, very reduced costs for students or free, that are activities that they can do and it is because of that generation of income.* SU1

Many also reported how the SU receives sponsorship from a local nightclub in return for organising and promoting events at that venue, as well as promoting the venue, during freshers' week.

> *So the commercial department works very closely with club promoters and club owners such as the [names] team that are both affiliated directly with the SU to put on events, also other clubs as well, to put on events at their venues.* SU2

> *But they [welcome mentors] are all in t-shirts and they're very, very visible and then very visibly on their t-shirts is the [nightclub] logo because [nightclub] sponsor and pay for… I tried to influence it this year by when they were doing the design, I was like "make that smaller, make 'Mentor' bigger", but again we got challenged by the sponsor this year saying 'We're paying this money there's no way you're having us this small', so that had to go out the window, so that's difficult in itself.* SU1

It was not considered to be a beneficial relationship by all the participants.

> *The fact that the nightclubs are tied into this, the Union takes sponsorship. Pretty piddling sponsorship frankly for what the nightclubs get out of it which is a captive audience for an entire year, you know, one night a week, which is just from their point of view they are making a fortune out of our students. But anyway, I do think*

that actually we shouldn't be taking sponsorship from nightclubs because that's endorsing the approach. UNI5

Most staff members, however, considered that the biggest challenge was that the SU and SU-related activities during freshers' week and across the year were driven by student-led committees (societies, sports, halls of residences, and freshers' week welcome mentors), giving the staff less control to change the balance of drinking and non-drinking events on offer. Despite their view that students would themselves be able to create the most appealing non-drinking events, this was not happening due to the historic tradition of student-led activities being associated with alcohol, particularly in student-led societies. This was confirmed by one respondent who was previously a welcome mentor (SU2).

They think it is a tradition, it becomes a tradition; "this is how it has happened". SU4

I think there is a lot of pressure on the committee to be seen to run a really good welcome programme and if there isn't enough club nights they would be seen as being boring, so I think there is a lot of peer pressure on them to provide it so that makes it difficult. UNI3

The club nights are always highly attended … That's how it was for me, that's how I thought it was gonna be when we went to first year university at [university], it was gonna be "oh I'll party four nights out of the five in the week and then we'll go start our classes." You know, that's the kind of ingrained culture that we have so there's that expectation that those kind of events are going to be put on. So we put them on. SU2

A small number of participants inferred that it was important to challenge student leaders on the diversity of the student population and their misperceptions of the drinking culture.

For every person that goes on that [charity drinking event] there are probably a dozen more that wouldn't touch it with a barge pole and yet they think it is a part of

university culture. It is like who is more switched on to what students want, them or us? UNI3

Lots of them will say "everybody wants to do this" and actually, you know and we know that not everybody does want to do it but how do we get that message across? SU4

In addition to this, some respondents from the University highlighted their relative lack of power over the type of events that are organised due to it being within the responsibility of the SU.

Well we have a coordinating group but the Union still runs week one. So we try and join things up so that we're operating more of a… and we try and apply pressure on them to change their behaviour but they are a largely autonomous organisation. UNI5

As raised above, the need for policy input and a strategic plan that encompassed student drinking across the University was clearly felt. However, one member of staff in a position of higher management highlighted how the lack of any major incidents involving student drinking may be preventing this from happening.

If there were to be a student death because of a rugby club initiation or something like that, and it has happened in other universities, then I am absolutely sure there would be a task group set up tomorrow to establish new policies on alcohol use and all the things that surround that, which does beg the question "well why would you need a death to do that? You know it's an issue so why aren't you doing it anyway?" UNI5

They reported how pressures from Universities UK to address another area of student welfare, sexual harassment, meant that this issue had been prioritised over drinking.

I think it's really about us, it's about prioritisation. As I say at the moment we've been focusing very much on sexual harassment because there's been a big UK

working group on it and that stemmed from a number of issues around the way in which universities have dealt badly with allegations of rape and knowing that we have to do better on that. UNI5

6.4 Discussion

6.4.1 Main findings

The aim of this study was to explore staff views of the student drinking culture and ways in which they have and could address it. Participants felt that there was a strong drinking culture at the university, and perceived there was a shift in students' drinking patterns to drinking more heavily and a particular concern for the safety of students' when drinking. They were aware of the many abstainers and students who preferred to not engage in heavy drinking or the nightclub culture, and that they can be socially isolated or feel pressure to engage in binge drinking. They felt that social opportunities to drink excessively were more common than non-drinking focused or alcohol-free events throughout the year. Although the SU had begun to take steps towards providing these in freshers' week, many felt that further work was needed to create and publicise more alternative and inclusive events at the SU and within student-led groups. There were a number of ways in which the University and SU had attempted to address problematic alcohol consumption; these included health awareness campaigns, addressing the culture of drinking during freshers' week and within student-led group events, and managing the adverse social consequences of binge drinking. Steps to address the drinking culture were, however, in their initial phase and there was no overarching governance or policy relating to alcohol that staff across the University and SU could work from. Despite this, they all felt a responsibility to address problematic alcohol consumption and that creating a culture of inclusivity to improve abstainers' social

opportunities and aid drinkers to make the choice to drink responsibly was important. A number of barriers to changing the drinking culture further were raised, including their perceived lack of control over student-led social opportunities, students' expectations of drinking prior to arrival at university and sponsorship links with local drinking venues.

6.4.2 Staff views on the drinking culture

These findings show that university and SU staff consider student drinking to be a problem and are aware of the changes in their drinking patterns, such as a recent increase in pre-loading. There was an enthusiasm from all to engage in the process of culture change, including those within the Students' Union, whose views have not been represented as much in previous work with stakeholders (136) but who can have a significant influence over the drinking culture within universities. There was congruence in the staffs' beliefs in how this cultural change could be achieved, through creating a social environment that promotes more social opportunities not focused entirely upon drinking, which would be inclusive to non-drinkers and light-drinkers, and by encouraging those who do drink to be more respectful of those who do not. It is possible that this view was reflected across the respondents in this study due to the steps that had already been taken at the University (and not at the time of the previous studies), although they echo the sentiment from staff and stakeholders at other universities in the UK (132, 136), suggesting that this is a potentially important and worthwhile way to address student alcohol consumption.

The interviews highlighted how there were many different types of student leaders within the University with influence over the type of social events on offer to first year undergraduate students: freshers' week reps, hall of residences reps, and sports club and society leaders. In contrast to the current literature on student-led groups and drinking (149,

150), this study highlights that it is not just sports clubs that are associated with problem drinking. Other types of student-led groups were also of concern to members of staff, due to their organisation of regular alcohol-based events, large-scale events and initiation ceremonies, which could have considerable influence on new students and alienate abstainers or light-drinkers. This highlights the importance of taking into consideration the potential influence of the various student leaders when determining how to reduce student alcohol consumption.

6.4.3 Current efforts to address student drinking

Steps that the university and SU had taken to address problematic alcohol consumption ranged across departments and organisations. The most significant work appeared to be from the SU standpoint to make the university a more inclusive environment, through training student leaders and trying to influence how much alcohol was a focus of social opportunities organised in freshers' week and by student-led groups throughout the year. However, the extent to which this approach has and could impact upon student drinking is more or less unknown. It is also questionable whether some of the steps that respondents described taking actually addressed problematic alcohol consumption. For example, in regulating student-led events one respondent put measures in to reduce anti-social behaviour rather than reduce the amount that alcohol students drank. The recent policy to prevent JCR reps from subsidising alcohol at their events does not mean that the event is any less based on alcohol or any more inclusive, and the process for societies to have their event approved still allowed students to have drinking-based events if they were able to demonstrate inclusivity in other ways, or could be bypassed by student leaders altogether. The recent introduction of a more intensive training and events process at the start of the academic year for sports clubs may prove to be a better way to prevent problematic alcohol

consumption, however, it is important to determine its acceptability to student leaders and effectiveness at reducing the number of alcohol-focused events and initiations, not just at the start of the year but throughout. As was highlighted by staff, student leaders could still be organising these 'underground', outside of the events process.

There was no measurement of how effective the existing programmes of work were at reducing problematic alcohol consumption or addressing the needs of abstainers and light-drinkers, highlighting the need to introduce ongoing monitoring and high quality evaluation to learn how to improve them if necessary. This could then guide university and SU staff, researchers and policy-makers to understand whether this type of approach is an effective way to reduce problematic student drinking, but also help to achieve buy-in of other stakeholders in taking the next steps to reducing student alcohol consumption.

Evaluation is also of importance in regards to the other efforts the university had planned and/or had implemented. For example, the potential of the alcohol referral scheme. None of the staff members knew the number of students that had been referred, its effectiveness at reducing how often mandated students drank to excess after completing the scheme, whether it had any knock-on effect on their peers, or whether it was a cost-effective scheme. All these questions will be important to answer in order to understand whether this individual-centred intervention is effective at reducing problematic alcohol consumption. Another example is the University's efforts to raise awareness, in particular the new scheme where students in halls of residences are provided with a unit measuring glass. Such interventions as this are founded on evidence that knowledge of units in the UK is poor (233), and pouring more than a standard drink size (one alcohol unit equivalent) is common (201, 234). By purposefully shaping the immediate drinking environment (in providing

information on how many units are in a particular alcoholic drink), the unit glass aims to affect a person's decision on how much to pour and then consume. However, in a semi-naturalistic experiment using a similar glass (235) with undergraduate students in the UK, there was no significant effect of using a unit-labelled glass versus a non-labelled glass on alcohol consumption. Although 85% of the participants had noticed and read the units labels on the glass, only 16% believed they influenced how much alcohol they consumed in the experiment indicating that providing this information at the point of consumption has no benefit in reducing amount consumed and may not be sufficient enough to result in behaviour change. Qualitative work with students at the same university indicated that despite having a reasonable understanding of the drinking guidelines, they were not used to influence behaviour. In addition students highlighted that the unappealing aesthetic of the glasses could be off-putting, and that the unit glass could be used in the opposite way as a tool to drink more in drinking games; other qualitative work has also suggested alcohol labels are used to select stronger drinks (236). Although this study did not show any evidence of promise, it would still be necessary to test and determine whether it is effective in reducing how much students drank on a pre-drinking session in a naturalistic setting i.e. within halls of residence, and to consider students' views on using the glass in this setting. As reported by Moore et al. (160) high levels of exposure to and recall of key messages from their intervention posters placed in halls of residences suggests such settings have good potential as intervention contexts for student drinking. Further in the above qualitative study, students felt that health messages on the unit glass were not salient to them and so it would be important to explore whether the information contained on the postcard being distributed with these unit glasses was pertinent to university students, and if the inclusion of health information improved use and effectiveness.

6.4.4 The need for a collaborative approach

Although all staff reported important and responsible steps being taken to address student drinking, it was clear that there was not yet a consistent approach across the University. For example, although there was training for student leaders, only some of it touched on drinking, and different types of training was delivered to different student leaders. In addition, awareness raising of alcohol-related issues was the focus of just one individual within the University. This was acknowledged by higher management, who highlighted there was no one individual or policy to encourage them to work collaboratively. There is, in fact, an **alcohol policy at the university** which not one member of staff recalled or referred to using. The lack of policy, or what may be a lack of awareness of policy, relating to student drinking has been found previously at other Universities (132, 136). In a recent study of four Welsh universities, implementing a social norms campaign to reduce alcohol consumption among students (160), it was found that the presence of existing systems and infrastructure within universities to address student drinking, or lack thereof, affected the extent to which the campaign was implemented and how widely it was disseminated (237). They recommended that for alcohol interventions to be implemented fully, the creation of student alcohol policies, a dedicated role within the institution to co-ordinate and take responsibility for action, and cross-departmental working were necessary. This highlights the importance of governance when tackling an issue such as student drinking within a university, to create a joined up, cross-departmental approach and delivery of a consistent message to students, and the need for the University to review their current policy and whether it meets the standards required to achieve this.

One way in which a cross-departmental, collaborative approach may aid university and SU staff is in addressing some of the barriers they felt they faced. Notably, the sense that they

had a lack of control over how social opportunities were primarily driven by student-led groups and the determination of some student leaders to hang on to the drinking culture. They themselves, however, and others within the organisation effectively answered their question in one way to address this – student training. Many talked about the need to train student leaders so that they took into consideration, and were respectful of, the diverse range of students in their groups. Culture shock training was delivered to some student leaders, but not all, and has the possibility to be adapted to drinking behaviour. Bystander training was delivered to sports groups but not others. Sharing with each other the different types of training that is being delivered and working together to ensure all student leaders receive it could be an important way to reduce the prevalence of and emphasis on initiations, drink-related coercion and general promotion of heavy drinking within student-led groups. As one respondent highlighted, after three years of banning welcome reps from drinking during freshers' week, it will not be known that the predecessors could drink, showing one small aspect of cultural change that comes with time. Delivering consistent training to all student leaders could be another step forward to achieving this throughout the academic year. There is no evidence to suggest whether current efforts are effective, however, so warrants further investigation.

Finally, although the participants in this study considered they had a responsibility to address student drinking within the University, many did not consider the drinking culture to be in isolation from wider society. In SCAM (136), stakeholders too argued that students' patterns of drinking were already developed and it was not any less of a university culture than it was "*young people's culture of alcohol consumption*" being "*played out in the university environment*". One aspect of student drinking that many respondents felt a lack of control over was students' expectations of the drinking culture prior to coming to university. This

highlights that addressing the issue of student drinking cannot be considered solely within the context of the university environment, which will be further discussed in the next chapter.

6.4.5 Strengths and limitations

This study considered the role of staff in student experience, which have been little studied in the context of student drinking at university. A wide variety of staff members were included in this study, ranging from those who work with students on a daily basis to those in higher management. Because of this, it was not possible to reach saturation and therefore the views of other staff members may differ from that presented here. Additionally, although their views were generally congruent with those of others at different universities, it cannot be assumed that these are transferable to those in other HE settings. It is possible that staff in universities where student drinking has not yet been considered differ to those here who have begun to take important steps in addressing this issue.

Despite efforts to include members of staff from the counselling service and wardens in other halls of residences, time restraints meant it was not possible to include them within this study. In SCAM, academic, support staff, nurses and counsellors were found to have differing views (136) so it is possible that counselling staff may have provided a different perspective on the drinking culture and students with alcohol-use disorders.

This study purposefully looked into the views of staff, however, it has also been suggested that student leaders have a large influence on first year students' drinking behaviour and that many rate drinking as an important part of their social events (132). Incorporating

student leaders' perceptions was considered, however, alongside the other qualitative work there was not sufficient time to recruit suitable numbers of staff and student leaders to cover the breadth of these groups. This study has highlighted the range of student leaders within the University, including sports club and society representatives (spanning a huge variety of sports, cultures and interests), freshers' week and JCR reps, whose views should also be considered and represented in future research. Future work with student leaders will be vital in helping to understand how to best to address student alcohol consumption within these groups, understand whether the steps taken by the University and SU (as described above) are acceptable and effective, and if they are not, to potentially unlock effective ways of working with them in the future. Staff in this study felt that in creating a more inclusive social environment it would be important to use ideas from student leaders and encourage them to set an example to other students, for example, by not hosting initiations and promoting drinking, and creating a host of social opportunities that are not focused upon drinking. Qualitative work will therefore be important to capture student leaders' views on the university drinking culture, the types of social events they organise, motivations and barriers to organising alcohol-focused and non-alcohol focused events, and how they perceive their role in promoting drinking / responsible drinking. In addition, although qualitative work indicates student leaders have an influence over student drinking, it has not been measured quantitatively. It may therefore be useful to measure how much students drink when socialising with student-led societies versus when socialising with friends, to gauge their potential influence and the need to direct interventions at the wider student population, at these societies as a whole, or certain societies in particular.

6.5 Conclusions

Staff were in agreement that the predominant drinking culture at the university was one of drinking to excess and expressed concern over this, including the impact it had on those who did not wish to drink heavily or abstained from alcohol. There was a general consensus across the university that there was a need to address the drinking culture and described steps that had been taken to create a more inclusive social environment, although felt more work was needed on this issue. There was a lack of governance, which highlights a need for policy to ensure a consistent and comprehensive approach on student drinking.

The next chapter summarises and discusses the research findings from Chapters 3 – 6, and concludes with recommendations to the University and future research considerations.

7 Discussion and conclusions

7.1 Summary

This thesis has explored patterns of, experiences with, and potential influences on drinking among first year undergraduates during the transition to university and across the first year. The findings of each study have each been discussed individually in relation to the wider evidence, but in order to clearly understand how these studies together meet the overall aim of this thesis the findings are integrated together below as a descriptive narrative, presented chronologically from before university, to freshers' week and across the academic year. This demonstrates the change in drinking patterns and experiences with drinking, and highlights some of the potential influences on student drinking behaviour according to the time frame of this thesis' aim. The key unique findings from these integrated findings are then discussed with mind of how to reduce how much students drink in the future. This is followed by the strengths and limitations of this thesis, the author's reflection, final conclusions, recommendations to the University and future research considerations.

7.1.1 Prior to university

In the period just before joining university, the survey findings show that the majority of students were drinkers, on average drinking 26.8 units per month (95% CI, 10.8-57.2) with many binge drinking on at least a monthly (46.5% 6-11 drinks/21.4% 12+ drinks, respectively) or weekly basis (13.2% 6-11 drinks/5.6% 12+ drinks, respectively). This concurs with students' reports in Chapter 5, who described that they drank more regularly once they turned 18 and got closer to university. Although some reported that when they drank they did so moderately, many described how they would drink to get drunk particularly by pre-

loading before going to a nightclub. Most of the drinkers came to university with the view that drinking to get drunk was acceptable, or was accepted in British culture, as long as it was not too frequent and did not cause any social harm to themselves or others. All students, drinkers and abstainers, came to university with an expectation that drinking would be a prominent feature of socialising, particularly during freshers' week, which they had heard from the media and older friends or siblings. Several staff members noted that one of the challenges in addressing student drinking was the entrenched expectations that students had of the university drinking culture as well as the wider drinking culture that existed in Britain, which was perceived, to some extent, as out of their control. In the run up to freshers' week, many students reported that the Students' Union (SU) and external organisations (mostly nightclubs) promoted a number of social opportunities through email and/or Facebook that were going to be taking place; these were heavily focused on nightclubbing and drinking.

7.1.2 Freshers' week

Both students and staff reported that freshers' week was a succession of club nights provided by the SU, which received a continued focus in the SU's advertising through emails and student reps. Most students who drank engaged with and enjoyed these events, some to a greater extent than others, and preceded these events with drinking and getting drunk in their place of residence. Among the students who drank, most reported that in freshers' week they drank in greater quantities and frequencies than ever before, mainly doing so on the club nights. This concords with the survey findings on drinking context, which shows that within the first month of university the majority of students drank with friends, not with a meal and at drinking venues or at home followed by a drinking venue. In the student interviews, those that drank reported pre-loading to get drunk but save money and aid

socialising. The self-reported changes in drinking pattern in the interviews were also found in the survey, whereby during the first month of university students drank a higher number of units (33.0 units (95% CI, 5.7-84.0)), with higher proportions students bingeing, and bingeing at greater frequencies and with greater quantities of alcohol (at least once in the past month: 27.3% 6-11 drinks/20.2% 12+ drinks; at least once a week: 38.9% 6-11 drinks/17.9% /12+ drinks). Those who binged prior to university were 14 times more likely to binge in the first month suggesting drinking behaviour develops prior to arrival, however, the high proportion of students binge drinking upon arrival to university, which remained elevated throughout the year suggests it is associated with a change in drinking patterns.

During freshers' week, there were also non-drinking focused events such as film nights, ice skating and comedy shows, which some students attended but most were not aware of. Students who were aware of these events felt that they received less attention on the SU marketing e-mails and by student reps compared to the nightclub events. Among these students, several drinkers did not attend because they either preferred to relax in their accommodation on their night off from nightclubbing or perceived that their new peers wanted to go to nightclubs and did not want to miss out on these opportunities to make friends, although would have attended had their peers been going.

During this week, the freshers' fair took place where student-led societies and local businesses promoted their groups, services and/or social events to the new first year undergraduate students. On the handouts, the majority of social events and a small percentage of their society-interest sessions (such as meetings or training) involved drinking. This included first socials of the year and regular events throughout the year. Only four were explicitly alcohol-free. The student interviews revealed that of those who joined a student-

led group, many organised a drinking-focused event for their first social, some of which included alcohol-based initiation rituals and coercion to drink by older students, despite staff members reporting that such events had been banned at the university. Although some of the social opportunities during freshers' week and initial couple of weeks at university were not based on drinking, some abstainers reported that they felt ostracised from socialising and found it difficult to make friends due to the dearth of social opportunities not involving heavy drinking. Along with some of the drinkers, they felt more of these opportunities were needed during freshers' week and with the student-led groups to aid their induction into the university community. Staff at the University and SU also felt that during freshers' week there were too many nightclub events, but had faced challenges when attempting to reduce the emphasis on these events from student leaders and local nightclubs who provided the SU with sponsorship.

The survey results for the first month of university show that at this time point spirits were the dominant drink of choice when drinking at home, or when drinking at home followed by drinking in a bar or nightclub. Some of the students who drank talked about how they had changed their style of drinking upon arrival to university, from lower-strength beverages to high-strength beverages such as shots. Much of the promotional material and pricing offers on alcoholic drinks in the freshers' fair included branded spirits and shots, suggesting this is a popular drinking style for students. Several of the staff members also expressed concern that over recent years students had started drinking stronger drinks (with a higher %ABV (alcohol by volume)), favouring shots over lower strength drinks which they felt led to students getting drunk very quickly.

7.1.3 Term-time

In the freshers' fair handouts, many student-led societies and local businesses also advertised drinking-focused events that were taking place throughout the year. Students reported that during term-time they went out less frequently than during freshers' week although continued to drink and get drunk when they did. In the surveys the highest proportion of students binge drinking is observed at the end of the first semester, but the reduction in frequency of going out is reflected in the final time point (during the second semester), which still remain higher than prior to university.

The continued emphasis on drinking when socialising appeared to be fostered by the regularity of nightclub events, similar to those that students had attended during freshers' week and were advertised at the freshers' fair, and socials organised by student-led groups. Compared to freshers' week there were, however, more non-drinking focused social opportunities mostly through student-led groups but which some students organised themselves. While some students were content with these, many felt they were unappealing and unpopular. Not all drinkers were in favour of the drinking-to-get-drunk culture, and alongside several of the abstainers, felt there needed to be more opportunities to socialise where getting drunk was not the aim. Some of the staff members too felt there was not a sufficient number of non-drinking focused events compared to the abundance of drinking-focused events across the year and highlighted the need to provide opportunities to, and improve the messaging around, drinking in moderation to students rather than provide all-or-nothing 'drink-or-be-sober' events.

7.1.4 Addressing the drinking culture

Staff members described how they had taken steps to address the binge drinking culture, with a recent campaign to reduce the emphasis on drinking during freshers' week and among student-led groups, and create a more inclusive atmosphere for light- and non-drinkers across the year. They had started to do this through student leader training, banning initiations and alcohol-based events that caused extreme anti-social behaviour and lobbying for less nightclub events during freshers' week. Their desire to continue to better publicise and promote inclusive events corresponded with students' perceptions that there was a need for more. Despite staff concerns that the student-led nature of socialising at university acted as a barrier to change the focus on drinking, students' desire for less focus on drinking during freshers' week and across the year highlights that it is warranted by the student body and gives university and SU staff the opportunity to take a slightly more authoritative approach to this issue. Staff also described taking some more authoritative steps in the past year within student-led sports clubs to address and prevent alcohol-related initiation rituals and heavily alcohol-based socials from happening, and with JCR reps to stop them from subsidising alcohol at their events, although these came into effect the following academic year to the student interviews.

Other attempts to address student drinking included regulating large student run events to prevent anti-social behaviour, provision of safe transport home, requiring student-led groups to disclose the events they were organising to the SU, and referring students who display anti-social behaviour as a result of alcohol or signs of alcohol dependence to external alcohol specialist agencies. These, however, with the possible exception of the alcohol referral service, did not address the underlying causes of or prevent (events and) drinking to excess and none of the described efforts were accompanied by any monitoring or evaluation on the

extent to which they had been implemented and their impact on student drinking and related harms. Alcohol education was undertaken by the University, though very few students recalled seeing this and paid little attention to it. Further, the student leader training and encouragement for them to create inclusive events was not delivered consistently by the SU across the range of student-led groups at the University.

7.2 Interpretation

Findings from this thesis demonstrate a marked increase in the frequency and quantity of students drinking and suggest that the decline observed in youth drinking (75) is not consistent across all subgroups of young adults. The recently published Youth Drinking in Decline report (75) does suggest that this decline is not limited to all social groups and the findings presented above show that it is important to consider university students as a unique social group in this respect. It is therefore be important in the future to include this trajectory into adulthood within future monitoring efforts (as university students are commonly not included in national surveys) of the trends in youth drinking so that it is not overlooked in efforts to continue this positive downward trend. Considering the findings of this thesis and existing evidence, opportunities to intervene with this group have been identified and will be discussed further below.

7.2.1 Interventions with the student population

When considering the implications of these findings and ways to reduce problematic alcohol consumption among the student population, one must look to the type of interventions that have already been trialled within a university setting. As detailed in Chapter 2, most interventions aiming to reduce student drinking have taken a social norms approach, aiming

to correct students' overestimation of peers' alcohol consumption which is associated with higher alcohol consumption (120, 128). Evidence of their effectiveness show modest reductions on alcohol consumption (159, 163). Although the aim of this thesis was not to directly measure whether students (mis)perceived how much their peers drank, as reported in Chapter 5 many drinkers perceived that their peers wanted to socialise solely at nightclubs and drink heavily during much of freshers' week, although themselves would have attended more non-drinking events, suggesting an approach which attempts to address misperceptions on what others drink would be suitable. In addition, most students were dismissive of health education as it was deemed to be too authoritarian and so an approach such as social norms may therefore be more acceptable as it allows students transitioning into adulthood to make an informed decision on their drinking behaviour.

One important consideration of the evidence surrounding the effectiveness of social norms interventions is that these studies have all taken place with students who were established at university, past the freshers' week period. Only one social norms-based intervention has attempted to address perceived norms at the point of arrival to university, although was a social marketing intervention which had difficulties in implementation and limited reach (237). It was found in this thesis that students came with expectations of heavy drinking and many had an established binge drinking behaviour. This suggests that attempting to address the misperceptions of student drinking once at university may be too late to result in any change in drinking behaviour and future studies should consider delivering such interventions pre-arrival. A recent trial with a slightly different approach, using the Theory of Planned Behaviour to target students' beliefs about alcohol consumption (238), supports the idea that brief interventions based on this premise delivered just before students enter university are acceptable and can reduce alcohol consumption whilst at university, but that

they should be repeated upon arrival to reinforce the message. In a UK, web-based social norms intervention, greater reductions in the number of units consumed in the past week were seen as participants received feedback on their alcohol consumption more often (163). Further, the students in this thesis continued to receive pro-alcohol messages throughout the academic year, suggesting that such reinforcement would be necessary. As highlighted in Chapter 5 there was also a perception among many drinkers that their peers only wanted to socialise at events which involved heavy drinking, particularly during freshers' week, yet many of the drinkers wanted to socialise away from heavy drinking and considered drinking-related events to be the main social offering at university. This suggests such interventions may also wish to incorporate messages which addresses these (mis)perceptions of how much peers approve or disprove of socialising with/without alcohol and highlighting what the university social environment can offer beyond drinking-related events.

Another consideration is whether it would be appropriate and effective to deliver interventions in the school setting. Evidence in the UK shows that educative programmes aimed at younger adolescents are feasible and acceptable for implementation in schools (239) and reduce drinking in the long-term, although the effects are modest (240) and evidence from a systematic review reported mixed-effects of school-based programmes on drinking behaviour (241). Many students in this thesis reported beginning to drink around the age of 16 and gradually drank more or more frequently as they got closer to university. Further quantitative evidence suggests that adolescents aged 16-18 years are significantly more likely to engage in behaviours such as binge drinking compared to those of a younger age (106). These findings suggest that this is a time when more risky drinking behaviour develops and that interventions targeting a slightly older adolescent group may be more appropriate. Given the dearth of research on 16 – 18 year olds, however, more work on how

drinking behaviour develops at this adolescent stage is needed. This will help in determining when interventions targeting this age group are most appropriate. Further discussion on how to measure drinking behaviour in this age group is continued in **future research considerations**. However, recent schools-based interventions aimed at other health behaviours have found that these type of approaches may not be feasible in practice with the decline of time devoted to health and wellbeing in the school curriculum, when such interventions are usually delivered (242) and so other settings, such as universities, may be more appropriate.

However, one important factor that has not yet been taken into account when evaluating individual-focused interventions is the context in which they are delivered. The context of the UK in relation to drinking is one where drinking to excess is widespread and culturally normalised, particularly within universities (1), which may act as a hostile environment for these types of interventions (205) and serve to undermine the intervention content, particularly to heavier drinkers. It is argued that this approach would likely be more effective if developed in tandem with changes in organisational practice (159, 160) consistent with those of a Healthy University (243), and environment. For example, the provision of non-alcoholic social events (244) or, as suggested in the student and staff interviews, better provision of and increased focus on social events by the SU and student-led groups that are not centred on drinking, but do not necessarily exclude it. Evidence from the US also stresses that individual interventions should not be considered as a panacea for student alcohol consumption or best practice if not used in tandem with other targeted efforts (245). Prevention efforts should span past traditional education to consider the campus environment, and surrounding community. The findings of this thesis support this approach, showing that upon arrival to university students are exposed to an abundance of drinking-

focused events on campus, drink promotions, alcohol advertising and peer-endorsed drinking. In their feasibility study of a halls of residence based social norms marketing campaign, Moore et al. (160) quantitatively assessed exposure to pro-alcohol messages, such as happy hours and student drinking nights in on- and off-campus bars and nightclubs, and found that a higher proportion of students were exposed to these over the social norms marketing messages, concluding that these may have undermined the intervention message. Therefore, efforts from the university should focus on addressing these issues prior to considering any individual-centred intervention. It may be more appropriate to then evaluate these type of interventions after a setting-level approach to address the pro-alcohol messages has been implemented. The opportunities where the University and SU could act to further shape the university drinking environment are set out in the **recommendations**.

Potential barriers to achieving such changes were identified in the interviews with students and staff, which have also been reported in a recent case study of another university in the UK. In the thesis by Brown, exploring the role of alcohol in the social processes of first year students at the transition point of joining university, multiple influences were identified prior and upon arrival to university which acted to pre-institutionalise students and normalise the concept of excessive alcohol use among students (1). Namely, the use of alcohol to provide commonality for new students, reduce anxiety and facilitate the development of social groups during freshers' week. These findings were echoed in this thesis, with many students then going on to use alcohol throughout the year in a similar pattern and in similar social situations as they had during freshers' week. Staff highlighted students' pre-existing expectations to be a key barrier to drinking, as well as the role of older students in forming and shaping the social environment for the younger students. Brown also identified that 'university processes' which presented social opportunities as central to initial

'institutionalisation' acted as a key barrier to encouraging students to drink less through safe drinking messages (1). Together with the findings presented in this thesis, this highlights the importance of drinking in the social environment to students. Brown argued that the existing structures at the University which endorse drinking and the economic benefits of selling alcohol to students through the SU, are too great to work against, therefore it may be more appropriate to take a harm-reduction approach (lessening the adverse social harms and injuries once students have drunk heavily e.g. by providing safe transportation home) rather than a preventative approach which reduces how much students drink. However, the findings of this thesis suggest that this approach is not of benefit to abstainers, whose student experience is affected by the emphasis on drinking particularly at the start of university. Having a sense of place, fitting in and being able to identify with the culture of their institution is important for students and for universities (246). A harm-reduction approach is also not of benefit to the drinkers who expressed a desire for a reduction in the emphasis of drinking during freshers' week and beyond. Findings from the student and staff interviews show that both groups within the University were amenable to change and it is reasonable to suggest that university and SU staff could take a more authoritative approach to addressing student drinking.

7.2.2 Student leaders

Furthermore, in contrast to Brown who explored social processes at the point of transition to university, this thesis considered students' experiences with drinking past the freshers' week period and identified other areas of influence on student drinking where the university and SU could act. It is clear from the student and staff interviews that student leaders have an important role in shaping the student experience and potentially a strong influence on drinking behaviour. It was proposed in **Chapter 5** that student leaders, similarly to those

interviewed, likely came to university as first year undergraduates expecting socialising at university to be based around heavy drinking, and were exposed to an abundance of drinking-focused events and pro-alcohol messages from the SU, local businesses and older students. Then, as they moved through the university and became leaders of sports clubs, societies or social representatives, they used the experiences they had as a first year student to organise drinking-focused social events, some of whom also encouraged and coerced younger students to drink heavily. The potential influence of student leaders has been considered before (132) but is more apparent from the studies presented here. However, within the scope of this thesis it was not possible to capture their own views. It is therefore recommended to further this work to determine the influence of student leaders on student drinking and explore potential opportunities and barriers to intervene with this subsection of the university population to reduce problematic alcohol consumption at university.

Such work could include qualitative exploration with the different sub-groups of student leaders, including those running sports clubs and societies, and freshers' week and halls of residences social representatives, to explore their attitudes toward alcohol and promoting drinking within their groups, the types of events they organise and why, how they perceive their role in promoting responsible drinking, and the potentially acceptability of interventions to encourage them to reduce the focus and/or promotion of drinking when socialising. Such interventions to explore include current efforts that were described by staff members as such as the sports leaders training, welcome event process and the adaptation of culture shock training, or others that have not been trialled with a select group, such as social norms brief interventions. Additionally, quantitatively measuring drinking behaviour more specifically with students who are student leaders and who are a part of student-led sports clubs and societies would help to provide more evidence as to whether there is a

particular sub-group where intervention efforts could be directed, as findings from the student and staff interviews suggest heavy drinking is not necessarily limited to sports groups, nor a feature of them all. More detailed recommendations in undertaking this work are presented in **future research considerations**. Undertaking this work will help to provide more evidence as to whether there is a need to address student leaders drinking behaviour, determine their influence on others and the best way to intervene with this select group of the student population. One possible consideration as mentioned above is trialling a social norms intervention during student leaders' training. This could be an ideal setting for testing the intervention's effects on heavier drinkers, with a lower risk of attrition, given the existing infrastructure for training student leaders at the University studied in this thesis combined with staff members' desire to discourage them from promoting heavy drinking. Additionally, taking into account the importance students place on drinking for bonding and socialising, particularly in student groups such as sports teams (247), this may be an appropriate approach with the aim not being total abstinence but reducing drinking to less harmful levels. This is also in line with university and SU staffs' desire to encourage moderation over abstinence. However, considering the differing nature of the student-led groups and student leaders it may be that different approaches, or a similar approach delivered in different ways (e.g. modes of delivery, intervention content) are more appropriate. Undertaking the work as described above will help to determine the way forward.

7.2.3 Policy and collaborative working

In order for the university to implement the **recommendations** that are set out below, there is a need for joined-up whole systems approach to ensure a consistent message is delivered across the various departments and organisations, which is currently lacking. Moore et al. (160) argued that the absence of collaborative working, policies, and infrastructure within

universities impacts upon effective delivery of interventions that seek to reduce student drinking. Findings from **Chapter 6** revealed that although there was a commitment from several staff to create a more inclusive culture at the university and reduce student drinking, the lack of awareness of the current alcohol policy and buy-in from higher management at the University risks these efforts being short-lived and lacking impact. Further, the findings of this thesis suggest that the **current policy** does not go far enough in achieving its aims to discourage excess alcohol consumption and promote the social acceptability of non-alcohol consumption. Active leadership is vital in achieving cultural change within universities (248). It would therefore be recommended that a policy which places alcohol as an important issue within the institutions existing aims and objectives (as recommended by the Healthy Universities approach (249)) is established to create accountability from the various organisations and departments that exist within the University.

The findings from **Chapter 6** also suggest that universities do not necessarily act proactively to address issues such as student drinking, responding to health and social issues within student populations which arise from incidents that affect the institutions reputation or from pressure from governing bodies, such as Universities UK (UUK) who "*shape the higher education policy agenda*" (250). At the University in this thesis, a recent drive to change the culture of sexual harassment came following pressure from UUK on universities nationally. A recent report evaluating the impact of the UUK campaign demonstrated how there had been significant success within the sector with an increase in disclosing sexual harassment and sexual assault (248). This indicates a cultural change in this area, which came from pressure outside individual universities and highlights the importance of harnessing the power and support of this organisation to address issues that affect students on a national scale, such as alcohol consumption. Momentum for this was created by the UUK Harassment Taskforce

after recognition of the evidence pertaining to student sexual harassment and a request from the UK Government Universities Minister to address this issue (251), highlighting also the need for governmental support to drive momentum. The current government's current approach to addressing university drinking in their most recent alcohol strategy encourages them to "*ensure that an environment of subsidised bars does not unduly promote drinking*" (12). However, this is clearly outdated and does not go far enough to address student drinking, given that findings in Chapter 4 showed that the majority of drinking occurred at home and in bars/nightclubs external to the university, the latter of which advertised their price promotions for alcoholic drinks to students during freshers' week and throughout the academic year. This highlights that efforts to prevent alcohol misuse at university may need to also focus on drinking in public drinking spaces. Lower prices and special offers on alcohol in drinking venues have been associated with greater alcohol consumption among students (252) and so strategies which address the student drinking environment off-campus (such as restricted alcohol price promotions in bars and nightclubs, and advertising of these promotions) may be important. Additionally, given the findings of this thesis, the recommended use of a social norms approach to encourage young adults to not believe that they "*can't have fun without alcohol*" but the lack of encouragement for changing the university environment and pro-alcohol messages is also found wanting.

Further, the pre-existing expectations, acceptance of and engagement in heavy drinking students had prior to arrival at university, which influenced their behaviour at university highlights the need for policy that addresses the wider attitudes towards and habits of drinking in the UK. The measures that the Government pledged to introduce which aimed to do this included a social norms marketing campaign (through the Change4Life scheme), which do show some evidence of promise (253) and introduction of the Responsibility Deal

(254), which did not. This is a public-private partnership with voluntary pledges from industry to introduce measures to make health promoting changes in the area of food, alcohol, physical activity, health at work and behaviour change with the aim to improve public health. However, evidence behind the majority of pledges from the alcohol industry (such as mandatory alcohol unit labelling, reducing the number of alcohol units on the market, tackling underage sales and the marketing of alcohol) shows that they are ineffective at reducing alcohol consumption and the most effective measures are those which impact the alcohol market to make it less available (such as providing more low-strength drink options) and more expensive (such as price promotions on lower strength options and minimum unit pricing (MUP)) (253, 255). Measures which seek to impact on these are necessary in order to reduce drinking at the population level, particularly those where heavy home drinking is normalised, which includes university students (1). With the introduction of MUP in Scotland, further research should also be carried out to monitor the impact on students' alcohol consumption, in terms of quantity and frequency of drinking, and drinking context (i.e. where drinking is occurring).

7.3 Strengths and limitations

This thesis took a mixed-methods approach to addressing the research aims and objectives. This has been defined as a class of research where the researcher combines quantitative and qualitative research techniques, moving beyond the dogmatic principles of positivism or interpretivism, to offer a logical and practical approach to research (5) that is guided by the foundation of enquiry (256). This means the researcher is not limited to choose a single approach to data collection, but rather it is guided by their research question (5). Traditionally, researchers have been forced to make a choice between positivist research models associated with quantitative methods and interpretive research models associated

with qualitative methods (6). It has been argued that the two paradigms are mutually exclusive, with different ontological (nature of reality) and epistemological (how we know what we know) stances. However, pragmatism advanced the idea that the consequences of research are more important than the process of research, advocating a needs-based, practical approach to research methods, which is now used widely and advocated over a traditionalist approach (5).

There were several advantages to taking a mixed-methods approach in studying student drinking across the transition to and first year of university. Firstly, in using a combination of approaches, a more complete and comprehensive understanding of the phenomena under investigation was gained by allowing the author to address different research questions that could not be answered by quantitative or qualitative methods alone (6). This also offsets and neutralises the limitations of each individual approach, to a degree. For example, the use of purely quantitative methods could not access the lived experience of students who do and do not drink alcohol (257). Vice versa, the use of purely qualitative methods cannot systematically measure drinking behaviour to provide a representative answer of how drinking behaviour changes across the student body, or the occurrence of alcohol-related content in a freshers' fair (5). Further, as discussed in **Chapter 4**, the use of past month could be considered a weakness when measuring drinking behaviour as it may have augmented recall error. However, findings presented in **Chapter 5** from the qualitative interviews with undergraduate students generally supports the approach when attempting to measure drinking behaviour over a specific period. When students were asked about their drinking behaviour it was evident that some did not always binge drink on weekly basis, with several reporting bingeing several times a week followed by a week or two of abstinence.

In a mixed-methods approach, data generated from one study can also be used to explain and illustrate the findings from another (7), especially when the nature of the phenomena under study is complex and requires a range of perspectives (257). In this case, the findings of the quantitative survey (presented in Chapter 4) were supplemented with concurrent qualitative student interviews (presented in Chapter 5) to understand why student drinking behaviour appeared to change upon arrival to university. This aided the author in identifying how efforts could be focused in order to reduce problematic student alcohol consumption and where further investigation could be undertaken.

Finally, using multiple methods of data acquisition allowed the author to triangulate the findings across studies that gathered information on the phenomena from multiple perspectives. The synthesis above shows that, largely, the findings from the online survey and freshers' fair were corroborated by those presented in the student interviews, and too those between the student and staff interviews, increasing the validity of the findings.

As described above, the use of multiple studies which largely supported each other's findings gives a good amount of confidence that they are a true and accurate representation of student drinking behaviour across the transition to and first year of university. It is important to note, however, that they were all conducted a single university and so it is possible the student experience may differ to others. Universities are diverse settings, from single- to multi-site campuses situated in rural, suburban or city areas, which may impact upon students' drinking experiences. They each have their own autonomous Students' Union, whose regulation or provision of drinking-related venues, events and promotion, may differ. For example, the university studied here showed signs of willingness and had begun attempts to change the strong cultural associations with drinking among their student

population, in contrast to those in recent studies (154). Variations in alcohol consumption in universities across the UK have also been observed, for example, between those in the North and South of England (93), although there is a general consensus that many students drink too much across the country, even if it is to varying degrees. Despite this, the findings and many of the recommendations are still likely to be applicable to other university settings, although it would be astute for institutions to consider their own unique environment when looking to address problematic alcohol consumption (1).

7.4 Authors reflection

In this thesis I adopted a pragmatic approach to explore patterns, experiences of and potential influences upon student drinking during the transition to university and across the first year. The purpose of taking this approach was to allow myself to seek out and use the most suitable and practicable methods to answer the research aim. Doing so allowed me to take a mixed-methods approach to data collection, which meant that I could use multiple sources of data together to result in useful knowledge that can now be translated into practical, outcome-oriented solutions to student drinking.

One important aspect of this work which worked well and was intrinsically linked to the success of the project was that I was able to build connections with stakeholders at the Students' Union within the University being studied, who made data collection all the more accessible for me. Having insider status within the University prior to the beginning of the doctorate programme meant that I had time to build these connections, which supported and furthered the data collection process in all four studies that make up this thesis. For

study one, a comprehensive list of who and where exhibitors would be located at the freshers' fair meant I was able to include them all within this study. For study two, it meant that I was able to add questions to an existing online survey that not only covered the timeframe that I was interested in exploring in relation to student drinking behaviour but was also sent to the entire first year population at the University ensuring a complete sampling frame. For study three, access to the survey used in study two then provided the basis of recruitment into the interviews, resulting in a much larger pool of participants to select from than had a different approach (for example, recruiting through halls of residences or course mailing lists) been adopted. And finally, in study four, it provided a starting point in recruiting important staff members that could provide insights into student drinking, whom I may not have considered or gotten access to without these connections. Additionally, having had three years by this point to build a relationship with the Students' Union, conduct and complete the first three studies meant that staff higher up in the organisation could place enough trust in me to take part in an interview. This enabled me to capture higher management processes as well as day-to-day practice within the organisation that was important in building a more complete picture of potential influences upon student drinking within the university environment and where attempts to reduce heavy drinking may be practically placed. However, despite this there were limitations within the design of the individual studies and overall that should be considered next time.

Whilst study one has provided the first insights into the nature of events and alcohol-related content in a freshers' fair, one important consideration if this was repeated would be to incorporate in-member checking, exploring the views and interpretations of first year students on the freshers' fair materials. The conclusions of this study were that alcohol-related events, advertising and price promotions are being promoted to new students, but

we do not know first year students' impressions of and the extent to which the content on the freshers' fair materials may influence their drinking behaviour. Understanding this would help further shape recommendations around whether and how such events and alcohol-related content should be regulated in the initial weeks of the academic year.

As discussed above, by taking advantage of existing avenues to collect data on student drinking behaviour in study two I was able to capture changes in the quantity and frequency of drinking over the timeframe set out in this thesis' aim. In doing this, however, my options were limited in what reference period could be used for the drinking behaviour questions. Although it would result in a smaller sample size, or greater efforts in recruitment, future work exploring drinking behaviour across this time period should consider using a shorter reference period and ask participants to recall past week or even daily drinking to capture more detailed and robust drinking data. This would help to reduce recall error and could be compared and contrasted with the findings of this thesis, to (hopefully) add weight to the importance of intervening in students' drinking behaviour around this important transitional period for young adults.

The timing of data collection for the third study, as with the survey, was bound by the research aim to explore students' experiences at set times within the academic calendar. As a result, data analysis could not be conducted immediately after each interview as there was limited time to interview the whole sample at each time point. Although this did not impede on the richness and quality of the data, it may have limited the extent to which I was able to explore emerging issues. One such example is the use of social media on alcohol practices, which had not been considered prior to interviews but was referred to by some of the participants. With recent studies showing a link between alcohol-related social media

engagement and greater self-reported drinking behaviour and related problems (258), subsequent research should incorporate students' perceptions on the portrayal of alcohol-use on social media. Gaining insight into this may create opportunities for social media-based interventions with university student drinkers to reduce how much they drink.

Despite the depth of data acquired from the staff interviews in study four, there were limitations to the sample. As discussed above, the timing of data collection for the student interviews was bound to the academic calendar. With the retention of a large proportion of this sample across the year and large volume of data resulting from these interviews, the staff interviews had to be pushed back until study three was complete giving less time to recruit into the staff interviews. Although the sampling was approach in this study was effective in capturing a range of staff from across the university, more time could have resulted in greater diversity in the sample. For example, more senior, academic and hall of residences staff, as well as others whose involvement in student alcohol issues is less obvious but whose experience may have provided insights that could enhance the narrative and opportunities for interventions to reduce how much university students drink.

I had also hoped to include students who led societies, sports clubs and JCR committees within study four given previous evidence suggesting they may influence student drinking behaviour (132, 147), but again timing issues precluded their inclusion. After completing studies one and three it became clear that the breadth of the student leader group was much bigger than previously considered. These studies also demonstrated how alcohol does not necessarily play as big a role in the social events of some societies compared with others. Given the timescale of the study it was decided that if they were included it would not be possible to capture the breadth of these groups and the findings would not paint an accurate

portrait of them so it was decided to focus solely on staff. In future studies, however, I would make it a matter of importance to include student leaders given this thesis' findings that they hold a great deal of influence over the university social environment. How this might be undertaken is discussed further in **future research considerations**.

My final point of reflection in undertaking this thesis is of my approach as a researcher. As stated in my reflexive statement I entered this work knowing it was important to detach my own viewpoint on the subject in building relationships with stakeholders as well as research participants. I felt this was especially important given that, to others, it is clear in doing this research I would consider reducing student drinking to be a matter of importance. I also found it imperative to, and did, approach all meetings with stakeholders and research participants with warmth, friendliness and impartiality. I believe this was key in gaining their trust, getting access to recruitment sources that would have not otherwise been open to me, and collecting good quality data which gives strength to my conclusions.

7.5 Recommendations to the University

Based on the results of the research presented in this thesis the University should consider:

- The co-creation of a student drinking policy between the University and Students' Union, which:
    - Commits them to addressing student drinking and makes the institution's position on the matter explicit, and is linked in with the institution's core aims and objectives to ensure it is factored into decision-making across the University and connects with key university events, such as freshers' week.

- Extends to the needs of non-drinkers and light drinkers so that they are not disadvantaged in terms of their academic and social experiences, for example, by encompassing a commitment to provide and promote more non-drinking focused social opportunities during freshers' week and across the academic year.
- Establishes commitment to the appropriate monitoring of student drinking and related harms to highlight gaps in policy and provision going forward and enable evaluation of programmes of work to reduce student drinking.
- Establishes commitment to appropriate evaluation plans into the current (safe taxi scheme, referral service to alcohol charity and university health initiative) and future (unit glass) programmes of work to reduce student drinking to assess whether they are being used, their effectiveness (and students' perceived effectiveness) at reducing alcohol consumption and/or adverse consequences and cost-effectiveness, and to identify areas of improvement.
- Subject to or as part of **further research**, consider including relevant programmes of work which aim to reduce the amount students' drink by enabling them to take personal responsibility for their drinking behaviour, such as social norms interventions, into the curriculum. These should target students before they arrive at university and continue during the academic year.

- Creating an alcohol sub-committee with representatives across departments within the University and Students' Union to work collaboratively, oversee the implementation of the policy and share learnings from each other.
- At the freshers' fair:

    - Banning drinking venues (bars, pubs and nightclubs) from exhibiting, or prevent them from providing price promotions on alcoholic drinks.
    - Student-led groups taking responsibility for the content they are promoting, and demonstrate how they provide a range of social opportunities and/or are inclusive to those who drink lightly or not at all.
    - Having health promotion stands present and visible to the majority of students so there is more opportunity for them to receive alcohol awareness messages.

- During freshers' week, reducing the number of nightclub events and have non-drinking focused social opportunities as a replacement rather than alternative in the evenings and continue to provide non-drinking social opportunities as alternatives on club nights:
    - Ensuing non-drinking focused opportunities receive the same amount of planning and commitment as nightclub events.
    - Ensuring non-drinking social opportunities are promoted to an equal extent as club nights pre-arrival on marketing e-mails, during freshers' week on marketing emails, social media pages and the freshers' week events website, through student welcome reps and any other source of event information.
    - Also consider opportunities that aid bonding without alcohol e.g. social sports evening for halls of residences, BBQ events for halls of residences, and introducing academic staff/support services into the discussion to create bonding events among course-mates as well as in hall of residences.
- During term-time, encouraging student-led groups to do the same by:

- Determining the acceptability and effectiveness of sports leader welcome events processes and consider rolling it out these to other student leaders.
- Creating a more rigorous events process whereby student groups must show how they are inclusive to abstainers and light drinkers in (e.g. a certain % of) their events, on their websites/social media accounts and at the freshers' fair.
- Consider introducing a consistent approach to training student leaders using existing resources, such as bystander training and culture shock training, which addresses the misperceptions that drinking is wanted by all students as a form of socialising and raises student leaders' awareness of different cultures and the type of social opportunities that could be introduced which are not focused on drinking.

- Consider extending the ban on JCR reps from subsidising alcohol to all groups, including banning student groups from having relationships with nightclubs that provide them with alcoholic drinks promotions.
- Consider introducing a ban on local nightclubs, pubs and bars from establishing relationships with student-led groups, which provide students with price promotions on alcoholic drinks.

7.6 Future research considerations

Highlighted above and within the thesis are several recommendations for further research, these are described in turn below with considerations for how such work could be undertaken. Sections 7.6.1 –7.6.4 consider further research that could be undertaken within

the University setting of this thesis; 7.6.5 relates to research that could be conducted in a wider UK setting.

7.6.1 Measure drinking behaviour among student leaders and members of university sports clubs and societies

As student leaders emerged as having a potentially large influence over the drinking behaviour of students who were a part of their respective sports club or society, it is recommended to further the work conducted in this thesis to determine their influence and explore potential opportunities to intervene with this subsection of the university population. As discussed above, it would be recommended for this work to take a mixed-methods approach incorporating quantitative measurement of the drinking behaviour of student leaders and student members of these groups, as well as qualitative exploration of student leaders' perceptions of and experiences with drinking. This section firstly describes the quantitative component, and is followed in section 7.6.2 with suggestions on the qualitative component that could be undertaken with student leaders.

The findings of this thesis indicate that although there are several types of student leader, the groups that organise social events on a regular basis and are likely to have an ongoing relationship with students are sports clubs and societies. Therefore, the quantitative element of this work would likely be directed towards these groups and their members as opposed to student representatives, such as the freshers' week and halls of residences representatives, who have more of a fleeting role within students' lives. Chapter 3 highlighted that there is a wide range of sports clubs and societies at the University; these groups are managed and regulated by the Students' Union. In order to obtain a complete sampling frame, the best

method of conducting this work would be via an online survey that is sent out to all student leaders and registered members of the society by the Students' Union.

There are several options for assessing drinking behaviour and previous studies have used a range of different measures. In this case, to measure usual drinking behaviour, it may be most suitable to use the AUDIT tool which is validated to measure typical alcohol consumption and give an indication on the levels of hazardous, harmful, and probable-dependent drinkers and has been used widely to measure student drinking behaviour. It was also used in the only other known study exploring the drinking behaviour of sports participating students in a UK university (93) so would allow for comparison with these findings as well as against those which used AUDIT in a general student population. The study may also wish to include other important measures of drinking, such as the quantity and frequency of drinking. Such measures could be those used in **Chapter 4**, which would allow for comparison of drinking behaviour with non-members in the same university. The data collected in the online survey also included those in other years of study, and so ethical approval could be sought to include this existing data into the analyses so as to not limit comparisons to first year undergraduates only. Of importance to note when comparing with existing data on the drinking behaviour of the general student population is that it would not be possible to separate those who are and are not members of a sports club or society, which could result in an under- or overestimation of the difference between members and non-members. This study may therefore wish to consider conducting a separate survey (for example, the existing SU survey) with the same measures of drinking behaviour used for the sports clubs and societies, and a question to determine (non-)membership to sports clubs/societies, for a more accurate comparison.

In order to determine how influential membership to different types of sports clubs and societies are on student drinking behaviour, it would be recommended to include questions asking which society (or societies) students are a part of, and for members, the extent to which they engage with those societies. For example, how frequently they attend meetings or training sessions and social events with each society they are a part of. Incorporating these would then enable analysis of the results by the type of student-led group (such as sports vs. societies, team sports vs. individual sports, different groupings of societies (as described in Chapter 3)) and according to levels of engagement (e.g. weekly vs. less than weekly). This would provide evidence as to whether certain types of student-led groups should be subject to intervention or whether it should be aimed at them at student leaders as a whole.

7.6.2 Explore student leaders perceptions of drinking and promoting responsible drinking

In order to gain a more complete understanding of the role of student leaders and opportunities to undertaken further intervention with them, it would be recommended to follow the quantitative work described above with a qualitative component that considers student leaders' perceptions of drinking and promoting responsible drinking. This should extend past sports club and society leaders to include the social representatives of freshers' week and in halls of residences. It would be essential as they were named as important influencers by staff in **Chapter 6** in shaping the social environment at different stages and places to leaders of sports clubs and societies. Although this then consists of a slightly different participant group to the quantitative component, it would still be recommended to undertake this work in conjunction with that described above as a sequential mixed-methods design (5) to allow for any findings from the quantitative component to inform the line of

enquiry in this study. For example, if a clear difference in the drinking behaviour of students in certain student-led societies emerged, this may direct the researcher to purposively recruit from these different groups to explore why such a difference exists.

Similarly to the recruitment method adopted in **Chapter 5**, student leaders who have completed the survey could be invited to take part in the qualitative element of the study (and student representatives contacted via e-mail), with a purposive sampling method in order to access the range of participants with the relevant experience who are able to provide insight into the phenomena of interest. Semi-structured interviews could be undertaken either as individual interviews or as focus groups with the committees of individual sports clubs, societies, or other representative groups. Previous work qualitatively exploring student drinking behaviour has taken on both forms indicating the acceptability and practicability of both forms of interviewing. The advantages of individual interviews may be that student leaders could be more honest in sharing their opinions and experiences, however, focus groups with the committees could generate richer data and bring greater insight into how decisions are made as a group. Taking this into account, the study may therefore wish to consider recruiting from approximately 20 (in line with previous studies) unique student-led groups and representative groups, although the make-up of this should be determined once the findings of the quantitative component have been obtained. Additionally, as this an area little studied a degree of flexibility is required and interviews should end once saturation has been reached. Given the diversity of the sample this could be greater than 20 individual groups. Should more students than required wish to take part, then a random selection according to their grouping would be taken. Interviews should also take place with student leaders towards the end of the academic year whilst still in post so

they do not have to complete the interview retrospectively but allowing them to have adequate experience in their role.

The areas that the interviews could cover include: leaders' own attitudes towards drinking and experiences with drinking prior as a first year undergraduate; the types of events they organise and why; what they perceive their role to be within the sports club, society or as a representative and how alcohol relates to this (in terms of promoting drinking and responsible drinking); and the acceptability of different interventions as part of their existing training requirements to encourage them to reduce the focus and/or promotion of drinking when socialising. Such interventions to explore include current efforts that were described by staff members as such as the sports leaders training and welcome event process (for sports clubs this could comprise evaluation of the current work, for other student leaders and representatives this could explore their perceptions of such an intervention), the adaptation of culture shock training to incorporate drinking as a core topic, or others that have not been trialled with a select group, such as social norms interventions. Interviews could also explore the acceptability of them being delivered in different modes, such as in-person or online, and by different people, such as the sports development officers, older peers or a health education specialist. Analysis of these data would then best be analysed using the Framework Approach as it will allow the researcher to map any differences and similarities according to the type of student leader.

7.6.3 Test the feasibility of a social norms intervention with the student population pre-arrival, with booster components

As students came to university with pre-existing expectations of drinking, and an increase was observed in the proportion of students binge drinking doing so on a more frequent basis

upon arrival to university, the transition point appears to be an important teachable moment to manage students' drinking expectancies and prevent a large increase in drinking upon arrival to university. One study has highlighted the potential of an online interventions to impact health behaviours of students during this significant life transition, but it has been suggested that the use of boosters upon arrival to university may be important (238) and those exposed to intervention messages several times drink less than those who view them once (163). Further, none have considered the feasibility and effectiveness of a social norms approach with incoming first year undergraduate students and further work is required to determine the effectiveness of such interventions in a UK setting in the time immediately before the transition to university.

In order to test the effects of the intervention, this would be best studied using a randomised-controlled trial design. Delivering the intervention online would enable access to students prior to university and for follow up as well as comparison with previous studies that have typically been web-based. All incoming students would be emailed with an invitation to participate in the study prior to university and followed up one- and six-months, in line with previous work. In order to assess the effectiveness of the intervention and additional booster components, students would be randomised to an intervention, intervention with booster or measurement-only (control) condition. Intervention participants would be invited to complete the intervention at the first time point and boosters would be invited to complete at the first follow-up and multiple time points up to the second follow-up (at six months) to reinforce the message.

Primary outcomes would be differences in alcohol consumption between the three groups at one- and six-months follow-up, similar intervention studies have measured units of alcohol

consumed and number of binge occasions in the past week, as well as the levels of hazardous and harmful drinking using the AUDIT or AUDIT-C questionnaire. Secondary outcome measures that researcher may wish to consider and have been used in previous studies include measures of students' perceived drinking norms; intervention message recall; the extent to which participants felt the intervention material was believable, relatable, changed their perceptions of others drinking behaviour and made them limit their own intake and perceived impact on drinking behaviour; how often students visited the intervention website; and an objective measurement of alcohol consumption using hair samples from a subsample of participants. In addition, demographic measures including age, gender, ethnicity, fee status and place of residence should also be taken into account and included in any analyses.

Undertaking this work would provide further evidence on the effectiveness of an online social norms intervention and whether it has any greater impact when delivered during the transition to university.

7.6.4 Evaluate current programmes of work at the University

As presented in Chapter 6, staff highlighted a range of programmes of work at the University, which aimed to reduce problematic alcohol consumption or minimise the adverse social consequences of alcohol consumption, that were currently in place or being planned. To the University, it is recommended to introduce ongoing monitoring and evaluation of student drinking and these programmes of work in order to determine their effectiveness. Ongoing monitoring of drinking behaviour can be continued through the inclusion of drinking behaviour questions in the existing online SU survey, which was sustained into the academic year following the 2016/17 period of study in Chapters 4 and 5, and would be recommended

to maintain this in the future. This data could then be used in the evaluation of any larger intervention efforts combining multiple programmes of work, such as changes to the emphasis of drinking in the social environment from freshers' week and throughout the academic year.

In respect to the smaller programmes of work that are existing or planned, as there are a range of different efforts, it would be most practicable for any evaluation to be simple and not resource intensive, such as a short online survey. The timing and measures used would depend upon the timing and goal of the intervention as they each aim to address different areas of alcohol consumption, from providing safe transportation to supporting individual students struggling with dependence. The evaluation of programmes that are targeted towards the broad student population, i.e. the University's health initiative, the unit glass scheme and the safe taxi scheme, could be integrated into the existing SU survey once a year to assess awareness, use and perceived impact. Measures that would be recommended in these surveys could include students' exposure, recall and use of the scheme, perception of the scheme (5-point Likert scale measuring the extent to which students agree the materials and messages were believable, relevant, changed their perceptions of drinking) and perceived impact on their drinking behaviour (5-point Likert scale measuring the extent to which students agree it made them more conscious of moderating the impacts of alcohol and limit their own alcohol consumption). A similar method has been used previously in evaluating a social norms marketing campaign with students (160). In respect to the referral scheme for students' struggling with alcohol consumption, a separate survey could be sent directly to individuals to assess students' perception of the scheme and impact on their drinking behaviour.

7.6.5 Further current understanding on how drinking patterns develop

As indicated in the introduction of this thesis, research on drinking patterns among young people transitioning through different pathways to adulthood have not yet been fully explored. The findings of this thesis give an indication of how and why the transition to university may be associated with an increase in drinking, but are limited to this timeframe. Ideally this sample would be followed up to measure trajectories of alcohol consumption past the university period and explore how drinking before and during university is associated with alcohol consumption in the mid-twenties and beyond, which could have long-term impacts on health. However, as discussed in Chapter 4, the sample size obtained in this study is too small to follow longitudinally. Further, drinking behaviour appears to develop prior to university age and so explorations of drinking trajectories would ideally include adolescence. Exploring such associations would require a longitudinal dataset with a large enough sample size to result in robust findings, however, this could prove extremely difficult in the context of diminishing funding for long-term cohort studies and difficulties in recruitment (259).

There is one recent longitudinal study that has followed individuals up from birth to the age of 24/25 years. The ALSPAC (Avon Longitudinal Study of Parents and Children) charted the health of 14,500 families in the UK for two decades from birth (260). This included a range of health measures, including drinking behaviour of the children from adolescence to 24/25 years. There is currently research underway to explore the influence of types of alcohol consumption on related harms in young adulthood and the pathways to problematic (dependent) alcohol use in young adulthood, which will provide evidence on the relationship between excessive drinking in adolescence and adult consumption and the key consequences in early adulthood. It is largely focusing on the influence of different alcohol

consumption patterns on health and social harm in young adulthood, and the pathway to problematic alcohol use (dependence) in young adulthood (261). This dataset provides an opportunity to explore trajectories of alcohol use from adolescence to young adulthood, particularly amongst the 16-18 years age group for which there is little evidence on drinking patterns, and how drinking behaviour differs among those on different pathways to adulthood, for example, those entering university to those entering the workforce aged eighteen, as well as associations between drinking in adolescence, drinking at university and beyond. This could provide further insight for researchers and public health policy makers who are developing and evaluating interventions on where and when efforts to prevent substance misuse in adolescence or early adulthood should be targeted. This could also add weight to the importance of stronger legislation to reduce population-level alcohol consumption, such as support for legislating on the cost, access and promotion of alcohol.

7.7 Conclusion

Many students came to university having engaged in or with an established binge drinking pattern and with pre-existing expectations that the culture of socialising at university is focused around drinking. This suggests that the time before university is important in establishing drinking patterns and drinking expectations. Frequency and quantity of drinking appear to increase upon arrival, when a higher proportion of students engage in binge drinking and on a more frequent basis. A large proportion of social events promoted by the SU, student-led clubs and local businesses were drinking-based and unsuitable for many students who abstained from alcohol or who did not wish to drink heavily. The presence of pro-alcohol messages that exist prior to, upon arrival and across the university academic year suggests that the university is a part of creating an environment that upholds the notion that drinking heavily is considered a normal behaviour, reinforcing and developing this behaviour, although the university and SU staff interviewed were keen for this not to be the case. Findings highlight the need for universities to create an environment that promotes more inclusive socialising, but that efforts to address students' expectations of drinking prior to joining university may be important.

8 Appendices

8.1 Journal of Public Health paper

Fuller A, Fleming KM, Szatkowski L, Bains M. Nature of events and alcohol-related content in marketing materials at a university freshers' fair: a summative content analysis. *Journal of Public Health*. 2017; 40(3):e320–e327.

A copy of this paper can be found at: https://academic.oup.com/jpubhealth/article-abstract/40/3/e320/4745831?redirectedFrom=fulltext

8.2 AUDIT tool

Alcohol use disorders identification test (AUDIT)

AUDIT is a comprehensive 10 question alcohol harm screening tool. It was developed by the World Health Organisation (WHO) and modified for use in the UK and has been used in a variety of health and social care settings.

Questions	Scoring system					Your score
	0	1	2	3	4	
How often do you have a drink containing alcohol?	Never	Monthly or less	2 to 4 times per month	2 to 3 times per week	4 times or more per week	
How many units of alcohol do you drink on a typical day when you are drinking?	0 to 2	3 to 4	5 to 6	7 to 9	10 or more	
How often have you had 6 or more units if female, or 8 or more if male, on a single occasion in the last year?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you failed to do what was normally expected from you because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you needed an alcoholic drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you been unable to remember what happened the night before because you had been drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
Have you or somebody else been injured as a result of your drinking?	No		Yes, but not in the last year		Yes, during the last year	
Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested that you cut down?	No		Yes, but not in the last year		Yes, during the last year	

Total AUDIT score	

Scoring:

- 0 to 7 indicates low risk
- 8 to 15 indicates increasing risk
- 16 to 19 indicates higher risk,
- 20 or more indicates possible dependence

Giving feedback and advice

If the score is lower

If the score is 8 or above, give brief advice to reduce risk for alcohol harm. If the score is 20 or above, consider referral to specialist alcohol harm assessment.

Alcohol unit reference



8.3 Online survey participant information sheet

School of Medicine

Epidemiology and Public Health

Participant Information Sheet

Final version 2.0: 20.06.2016

Title of Study: *Measuring students' alcohol consumption*

Study ID – Student drinking study

Name of Researcher(s): Amy Fuller, Lisa Szatkowski, Manpreet Bains, Kate Fleming

We would like to invite you to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you. One of our team will go through the information sheet with you and answer any questions you have. Talk to others about the study if you wish. Ask us if there is anything that is not clear.

What is the purpose of the study?

We are asking students at the University of Nottingham to report their previous month's alcohol consumption at three or four (first year students) time points across the 2016/17 academic year. This study will help us to understand student drinking patterns at the University, including how many students do not drink alcohol; and for those who do, how much, how often, where and how or whether this changes across the academic year. In the long run this will help us to develop suitable

policies and interventions for managing alcohol consumption at university to help reduce harmful drinking and improve the student experience.

Why have I been invited?

As you are a student at the University of Nottingham we would like to invite you to take part in this survey. All undergraduate and postgraduate students are being invited to take part on this study.

Do I have to take part?

It is up to you to decide whether or not to take part. By completing the questionnaire, we will assume you have given consent to your answers being included in the study. If you decide to take part you are still free to withdraw by not answering the questions and without giving a reason; this will not have any negative repercussions on your course of study. However, any information you have already given might be used in the study, but this will not identify you in any way.

What will happen to me if I take part?

If you are happy to take you can continue with the survey and answer the questions. The survey should take approximately 15-25 minutes. Only your answers to specified questions (listed at the start of the survey) will be accessible to the researchers and will remain anonymous to the researchers. You will not be identified in any way in the study write up.

Expenses and inconvenience allowance

At the end of the survey, the Students' Union offers you the option to be entered into a prize draw (details listed at the start of the survey). No further inconvenience allowance is offered by answering the study questions in this survey.

What are the possible disadvantages and risks of taking part?

There are no foreseeable disadvantages of taking part.

What are the possible benefits of taking part?

The information we get from your participation in this study will be invaluable to help us understand students' drinking behaviour at the university. With your help, we hope to develop interventions so that we can reduce harmful drinking and improve the student experience.

Will my taking part in the study be kept confidential?

We will follow ethical and legal practice and all information about you will be handled in confidence.

If you join the study, some parts of the data collected for the study will be looked at by authorised persons from the University of Nottingham and Students' Union who are organising the research. Any information about you which leaves the Students' Union will have your name removed (anonymised) and a unique code will be used so that you cannot be recognised from it by the researchers or any authorised people who check that the study is being carried out correctly.

All information which is collected about you for use in the research study will be kept **strictly confidential**, stored in a secure and locked office, and on a password protected database. All data will be kept securely for 7 years. After this time your data will be disposed of securely. During this time all precautions will be taken by all those involved to maintain your confidentiality; only members of the Students' Union will have access to your personal data.

What will happen if I don't want to carry on with the study?

1. Your participation is voluntary and you are free to withdraw at any time, without giving any reason. This will not have any negative repercussions on your course of study.

2. However, any information you have already given might be used in the study write-up, but this will not identify you in any way.

What will happen to the results of the research study?

Survey data will be analysed by the research team before being reported. The results will be written as part of the lead researcher's PhD thesis and may be presented in appropriate scientific journals and at conferences. All participants will be anonymous. Anonymous study data will be kept securely on password-protected computers in a secure office. If you take part in this research, we will be happy to provide copies of these publications to you.

Who is organising and funding the research?

This research is being organised by the University of Nottingham and is being funded by the UK Centre for Tobacco and Alcohol Studies.

Who has reviewed the study?

All research in the University of Nottingham is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by the Faculty of Medicine & Health Sciences (FMHS) Research Ethics Committee.

What if there is a problem?

If you have a concern about any aspect of this study, you should contact either Amy Fuller (PhD student) or Manpreet Bains (supervisor). The full contact details of the research team are given at the end of this information sheet. If you remain unhappy and wish to complain formally, you should then contact the FMHS Research Ethics Committee Administrator, c/o The University of Nottingham, School of Medicine Education Centre, B Floor, Medical School, Queen's Medical Centre Campus, Nottingham University Hospitals, Nottingham, NG7 2UH. E-mail: louise.sabir@nottingham.ac.uk.

Further information and contact details

Amy Fuller

PhD Student

University of Nottingham

Division of Epidemiology and Public Health

Clinical Sciences Building

Nottingham City Hospital

Nottingham

NG5 1PB

Tel: 0115 8231350

Email: msxat5@nottingham.ac.uk

Dr Manpreet Bains

Assistant Professor in Mixed-Methods Health Research

University of Nottingham

Division of Epidemiology and Public Health

Clinical Sciences Building

Nottingham City Hospital

Nottingham

NG5 1PB

Tel: 0115 8231360

Email: manpreet.bains@nottingham.ac.uk

8.4 Variables discrepancies

Further details of the discrepancies in demographic information provided by the same respondent across different surveys. A description of these discrepancies can be found on page 75.

Variable name	Number of discrepancies observed	Number of responses that could be selected because:				Where all answers are different
		A majority answer was provided	Answer provided in one survey and no response to another	Age moved up a category in subsequent surveys	Study level foundation was given at second time point	
Fee status	14	3	-	-	-	11
Age	68	-	3	61	-	4
Gender	14	3	6	-	-	5
Ethnicity	10	-	1	-	-	9
Faculty	75	17	31			27
Study mode	0	-	-	-	-	-
Study level	62	13	-	-	15	34
Total	**243**	**36**	**41**	**61**	**15**	**90**

8.5 Students' Union letter of approval

Students' Union
UNIVERSITY OF NOTTINGHAM

University of Nottingham Students' Union
Portland Building
University Park
Nottingham NG7 2RD

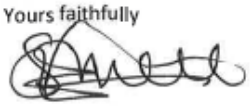
+44 (0) 115 846 8800
www.su.nottingham.ac.uk
studentsunion@nottingham.ac.uk

To whom it may concern

I am writing to confirm that I provide full support to the PhD student research project entitled: Patterns and perceptions of alcohol consumption during the transition to university and across the first year.

Further to this, I have given permissions for the researchers to include questions to measure alcohol consumption in the University of Nottingham Students' Union surveys as detailed in the ethics application. I also give permission for the researchers to have access to this data, plus that collected from demographic questions, once the surveys have been completed and participants have been anonymised.

Yours faithfully



Sarah Melville

Dr. Sarah Melville

Customer Insight Manager.
University of Nottingham Students' Union, Portland Building, University Park, Nottingham NG7 2RD
sarah.melville@nottingham.ac.uk, T: 0115 84 68755
Web: www.su.nottingham.ac.uk, Twitter: @UoNSU, Facebook: UofNSU

Students' Union
UNIVERSITY OF NOTTINGHAM

The University of Nottingham Students' Union is a registered charity no. 1136986 and a company limited by guarantee registered in England no. 7229624.

UNU Services Ltd is a private limited company registered in England no. 02223522.

8.6 Drinking status, by gender

Current, never and ever drinkers at each time point, by gender, n (%)*

	SUS 1		SUS 2		SUS 3		SUS 4	
	Male (N=476)	**Female** (N=892)	**Male** (N=362)	**Female** (N=590)	**Male** (N=188)	**Female** (N=314)	**Male** (N=192)	**Female** (N=331)
Current drinker	371 (77.9)	695 (77.9)	264 (72.9)	440 (74.6)	145 (77.1)	286 (91.1)	149 (77.6)	245 (74.0)
Current abstainer	45 (9.5)	108 (12.1)	43 (11.9)	84 (14.2)	14 (7.5)	15 (4.8)	29 (15.1)	63 (19.0)
Lifelong abstainer	60 (12.6)	89 (10.0)	55 (15.2)	66 (11.2)	29 (15.4)	13 (4.1)	14 (7.3)	23 (7.0)
	χ^2=3.92, p=0.141		χ^2=3.85, p=0.146		χ^2=22.02, p<0.001		χ^2=1.29, p=0.524	

*Percentages rounded to 1 decimal place

8.7 Binge drinking (6-11 drinks), by gender

Frequency of 6-11 drink binge occasions among current drinkers, by gender, n (%)*

	SUS 1		SUS 2		SUS 3		SUS 4	
	Male (N=371)	**Female** (N=695)	**Male** (N=264)	**Female** (N=440)	**Male** (N=145)	**Female** (N=286)	**Male** (N=149)	**Female** (N=245)
Missing	2 (0.5)	1 (0.1)	14 (5.3)	15 (3.4)	5 (3.5)	4 (1.4)	4 (2.7)	7 (2.9)
Never	52 (14.0)	143 (20.6)	27 (10.2)	82 (18.6)	12 (8.3)	35 (12.2)	10 (6.7)	37 (15.1)
Not in past month	74 (20.0)	153 (22.0)	26 (9.9)	67 (15.2)	24 (16.6)	40 (14.0)	35 (23.5)	46 (18.8)
Once a month	74 (20.0)	166 (23.9)	38 (14.4)	62 (14.1)	16 (11.0)	68 (23.8)	27 (18.1)	51 (20.8)
2-3 times/ month	100 (27.0)	164 (23.6)	31 (11.7)	77 (17.5)	27 (18.6)	66 (23.1)	34 (22.8)	55 (22.5)
1-2 times/ week	56 (15.1)	54 (7.8)	89 (33.7)	95 (21.6)	44 (30.3)	67 (23.4)	25 (16.8)	39 (15.9)
3-4 times/ week or more often	13 (3.5)	14 (2.0)	39 (14.8)	42 (9.6)	17 (11.7)	6 (2.1)	14 (9.4)	10 (4.1)
p value	χ^2=25.0, <0.001		χ^2=29.4, <0.001		χ^2=31.1, <0.001		χ^2=11.2, 0.083	

*Percentages rounded to 1 decimal place

8.8 Binge drinking (12+ drinks), by gender

Frequency of 12+ drink binge occasions among current drinkers, by gender, n (%)*

	SUS 1		SUS 2		SUS 3		SUS 4	
	Male (N=371)	**Female** (N=695)	**Male** (N=264)	**Female** (N=440)	**Male** (N=145)	**Female** (N=286)	**Male** (N=149)	**Female** (N=245)
Missing	1 (0.3)	-	13 (4.9)	19 (4.3)	3 (2.1)	7 (2.5)	6 (4.0)	7 (2.9)
Never	151 (40.7)	412 (59.3)	75 (28.4)	230 (52.3)	35 (24.1)	134 (46.9)	29 (19.5)	99 (40.4)
Not in past month	81 (21.8)	133 (19.1)	40 (15.2)	62 (14.1)	22 (15.2)	54 (18.9)	41 (27.5)	68 (27.8)
Once a month	55 (14.8)	88 (12.7)	35 (13.3)	60 (13.6)	25 (17.2)	44 (15.4)	29 (19.5)	31 (12.7)
2-3 times/ month	46 (12.4)	39 (5.6)	32 (12.1)	25 (5.7)	18 (12.4)	29 (10.1)	18 (12.1)	26 (10.6)
1-2 times/ week	34 (9.2)	22 (3.2)	41 (15.5)	32 (7.3)	28 (19.3)	14 (4.9)	17 (11.4)	13 (5.3)
3-4 times/ week or more often	3 (0.8)	1 (0.1)	28 (10.6)	12 (2.7)	14 (9.7)	4 (1.4)	9 (6.0)	1 (0.4)
p value	χ^2=52.8, <0.001		χ^2=59.3, <0.001		χ^2=50.4, <0.001		χ^2=32.0, <0.001	

*Percentages rounded to 1 decimal place

8.9 Invitation to interview in online survey

In addition, as part of the alcohol research project being conducted by the UK Centre for Tobacco and Alcohol Studies we would like to invite undergraduate students to take part in up to 3 short interviews over the next year to explore your views on the alcohol culture at university in more detail. It does not matter if you are a drinker or non-drinker – we want to hear from both! You will receive a £15 Amazon voucher for each interview you complete.

Are you happy to be contacted by a researcher by e-mail once you have arrived at university, with further details about these interviews?

8.10 Student participant information sheet

Department of Epidemiology & Public Health

School of Medicine

Participant Information Sheet

Final version 2.0: 20.06.2016

Title of Study: *Exploring students' views of alcohol consumption*

Study ID – Student drinking study

Name of Researcher(s): Amy Fuller, Lisa Szatkowski, Manpreet Bains, Kate Fleming

We would like to invite you to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you. One of our team will go through the information sheet with you and answer any questions you have. Talk to others about the study if you wish. Ask us if there is anything that is not clear.

What is the purpose of the study?

This study will help us to understand views of drinking alcohol at university from a student's perspective. We want to hear your views about your drinking behaviour and the alcohol culture at university in general. In the long run this will help us to develop suitable policies and interventions for managing alcohol consumption at university to help reduce harmful drinking and improve the student experience.

Why have I been invited?

As you are a first year student at the University of Nottingham we would like to invite you to take part in up to three short interviews across the academic year to help us gather views of students. We are inviting up to 30 participants like you to take part.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason; this will not have any negative repercussions on your course of study. However, any information you have already given might be used in the study write-up, but this will not identify you in any way.

What will happen to me if I take part?

If you are happy to take part a member of the research team will arrange the first interview at a convenient time for you, and will arrange a time for the second and third interviews at a later date. Interviews will be carried out face-to-face in a private room in either a University library or Academic building. The interview will cover topics such as your views on drinking alcohol, the alcohol culture at university and whether you think there is a need to manage student drinking. A digital recorder will be used to record interviews so that the interviewer does not have to take notes and can focus on what is being said by participants. Interviews will take up to one hour. What you say might be used in the study write-up, but you will remain anonymous and information will not identify you in any way.

Expenses and inconvenience allowance

Participants will be paid an inconvenience allowance to participate in the study in the form of a £15 Amazon voucher per interview.

What are the possible disadvantages and risks of taking part?

There are no foreseeable disadvantages of taking part.

What are the possible benefits of taking part?

The information we get from your participation in this study will be invaluable to help us understand students' views of their drinking behaviour and drinking alcohol at the university. With your help, we hope to develop interventions so that we can reduce harmful drinking and improve the student experience.

Will my taking part in the study be kept confidential?

We will follow ethical and legal practice and all information about you will be handled in confidence.

If you join the study, some parts of the data collected for the study will be looked at by authorised persons from the University of Nottingham who are organising the research. They may also be looked at by authorised people to check that the study is being carried out correctly. All will have a duty of confidentiality to you as a research participant and we will do our best to meet this duty.

All information which is collected about you during the course of the research will be kept **strictly confidential**, stored in a secure and locked office, and on a password protected database. Any information about you which leaves the institution will have your name removed (anonymised) and a unique code will be used so that you cannot be recognised from it.

Your personal data (e-mail address, telephone number) will be kept for one year after the end of the study so that we are able to contact you to share the findings of the study and for follow-up interviews (unless you advise us that you do not wish to be contacted). All interview data will be kept securely for 7 years.

After this time your data will be disposed of securely. During this time all precautions will be taken by all those involved to maintain your confidentiality; only members of the research team will have access to your personal data.

If you mention anything to the researcher that may indicate your alcohol consumption is causing you physical or mental harm, or you disclose that you are worried about your drinking, you will be signposted to the Student Health Service at the University of Nottingham but the researcher will not reveal your identity to anyone.

What will happen if I don't want to carry on with the study?

1. Your participation is voluntary and you are free to withdraw at any time, without giving any reason. This will not have any negative repercussions on your course of study.
2. However, any information you have already given might be used in the study write-up, but this will not identify you in any way.

What will happen to the results of the research study?

Interview data will be analysed by the research team before being reported. The results will be written as part of the lead researcher's PhD thesis and may be presented in appropriate scientific journals and at conferences. All references to participants or quotes in the thesis or subsequent publications and presentations will be anonymous. Audio-recordings and transcripts of interview data will be kept securely on password-protected computers in a secure office. If you take part in this research, we will be happy to provide copies of these publications to you.

Who is organising and funding the research?

This research is being organised by the University of Nottingham and is being funded by the UK Centre for Tobacco and Alcohol Studies.

Who has reviewed the study?

All research in the University of Nottingham is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by the Faculty of Medicine & Health Sciences (FMHS) Research Ethics Committee.

What if there is a problem?

If you have a concern about any aspect of this study, you should contact either Amy Fuller (PhD student) or Lisa Szatkowski (lead supervisor). Contact details are given at the end of this information sheet. If you remain unhappy and wish to complain formally, you should then contact the FMHS Research Ethics Committee Administrator, c/o The University of Nottingham, School of Medicine Education Centre, B Floor, Medical School, Queen's Medical Centre Campus, Nottingham University Hospitals, Nottingham, NG7 2UH. E-mail: louise.sabir@nottingham.ac.uk.

Further information and contact details

Amy Fuller	**Dr Lisa Szatkowski**
PhD Student	Associate Professor in Medical Statistics
University of Nottingham	University of Nottingham
Division of Epidemiology and Public Health	Division of Epidemiology and Public Health
Clinical Sciences Building	Clinical Sciences Building
Nottingham City Hospital	Nottingham City Hospital
Nottingham	Nottingham
NG5 1PB	NG5 1PB
Tel: 0115 8231350	Tel: 0115 8231391
Email: msxat5@nottingham.ac.uk	Email: lisa.szatkowski@nottingham.ac.uk

8.11 Student interview guide – drinker time point 1

Interview guide

September/October 2016

-A- Participants

Interviewer: Amy Fuller

Interviewee: -A- participants

Location: University of Nottingham library

Brief description of the project:

We're undertaking this project to find out more about students' views on drinking alcohol and their experiences with alcohol. You've been selected as you told us you do drink alcohol. We're going to start by talking about your views on alcohol in general and then go on to talk about the things you do socially, then what you've been doing during the time you've spent at university so far.

Confidentiality statement:

I would like to reassure you that all data you provide will be kept strictly confidential by myself. I will be voice recording this interview, any quotes from this recording used in my thesis and any other reports will not identify you in any way. Your participation is entirely voluntary and you are free to withdraw at any time without giving a reason.

About the interview:

I'll be asking you a few questions about your opinion on and experiences with alcohol. We are exploring your opinion and views so would like to encourage you to talk as freely as possible. The purpose of the interview is not to make any judgements about what you say, it's an exploration of your views. Don't be put off by me not sharing my opinion, or making notes, I'm still listening!

1. Ask the participant if they have any questions before starting the interview
2. Check they have read the information sheet
3. Check still happy to take part and ask them to sign the consent form

General views of drinking alcohol

1. Can you tell me about when you started drinking alcohol?

   Reasons why

   How do you think that compares to your peers, people of the same age around the UK?

   Compared to people at school, at university, in the workplace

2. Can you tell me about your opinion on drinking alcohol, in general?

   a. How might you describe the alcohol culture in the UK?

      Prompt: do you think drinking alcohol is a problem in the UK?

   b. How would you describe the drinking culture in your age group?

      Probes: at school; differences in university students vs. those at work

Drinking behaviour and expectations before university

3. Before you came to university, can you describe what kind of things you did socially?

   a. Did any of these involve drinking alcohol?

      If yes, can you describe a typical social occasion that included drinking alcohol?

      Prompts: Who with, where, when; how often did these occasions occur?

      If no, can I just check, there were no occasions where you drank alcohol socially?

      Probe why, any occasions where friends drank but you did not [onto Q4]

b. What were the main reasons for you attending these?

c. To what extent did alcohol feature?

d. On these occasions, (roughly) how many alcoholic drinks did you normally drink?

Unpick how normal or excessive this may have been

Awareness of units consumed

e. Are there any other typical social occasions that you have not mentioned?

4. Before you came to university, did you have any expectations of what the alcohol culture would be like during freshers' week/generally at university?

    a. How did you expect you would fit into this culture?

    b. Can you describe what the alcohol culture is like now you have arrived at university?

5. Can you tell me about your expectations of the types of social activities that would be available during freshers' week?

    a. What types of social events did you expect you would go to? Why?

    b. What kind of social events were you hoping to go to? *Explore any differences between hopes & expectations.*

Drinking behaviour and expectations during university freshers' week

6. Can you describe what types of things you did socially during your first week at university?

    a. Did any of these involve drinking alcohol?

    If yes, can you describe these occasions?

    Prompts: Who with, where, when; how often, who organised it?

    If no, can I just check, there were no occasions where you drank alcohol during freshers' week?

    Probe why, any occasions where friends drank but you did not [onto Q8 if not]

    i. Why did you decide to attend these events?

    If mentioned any sport clubs or societies – unpick importance of attending such an event (and drinking alcohol)

    ii. Did you have any expectations of what the events would involve before they started?

    Probe: any plans on how much/type of alcohol they would drink

    iii. To what extent did alcohol feature in these events?

    iv. Can you tell me about how many alcoholic drinks you typically had at the events?

    Unpick how normal or excessive this may have been

    Awareness of units consumed

    v. Can you tell me about the people you were with and what they drank?

    Unpick their behaviour, students' views on friends drinking, do they think it had an impact upon their own drinking – in what way?

    vi. Are there any other social occasions during freshers' fair that you have not mentioned?

7. How would you describe your drinking behaviour during fresher's week? *Compared to before university*

8. Confirm with participant the typical amount they said they drank on a night during fresher's week and how that compares to a typical social event before university.

    a. How do you think this compares to the UK guidelines which recommend how much alcohol someone should drink each week?

    b. Tell participant how it compares (state guidelines) and ask what they think about this?

9. Were there any negative outcomes from drinking during Fresher's week?

    Hangover, missed any daytime events, etc.

    a. How did you feel about this?

        Probe into drinking behaviour going forward

    b. Are you aware of any potential negative outcomes from drinking alcohol?

        Probe into influence on their behaviour

10. [If not mentioned] Did any social occasions you attend involve not drinking alcohol?

    i. If not, why not?

        i. Were you aware of any social events taking place that were not based on drinking alcohol during Fresher's week?

        ii. What's your opinion on the availability of social events not based on drinking alcohol during Fresher's week?

            Probes – type of events, how well advertised, how often they take place, were you expecting there to be any?

iii. [If not aware] What's your opinion of having the option to attend social events that aren't based on drinking alcohol, or having alcohol-free nights with friends during freshers' week?

Probe type of event they would enjoy

ii. If yes, can you describe what these involved?

Probes: Who with, where, when

i. Why did you decide to attend this type of social occasion?

Probes: Friends, enjoyable, don't like drinking alcohol; don't always want to drink alcohol, etc.

ii. What did you think of them?

iii. What's your opinion on the availability of social events not based on drinking alcohol during Fresher's week?

Probes: balance of alcoholic/non-alcoholic event options, variety of these types of events, how often they take place, expecting there to be any? How well advertised.

11. Have you seen or been given anything about drinking alcohol at university , such as staying safe when drunk or managing how much you drink?

a. If yes, can you describe it?

Can you tell me how you used it?

Did you find it useful?

Did it change how you [insert relevant behaviour according to material]?

b. If no, would you have liked to have been given any advice or information about drinking at university? Why?

In what form would you like this information, when would you like to receive it?

8.12 Student interview guide – abstainer time point 1

Interview guide

September/October 2016

-B- Participants

Interviewer: Amy Fuller

Interviewee: -B- participants

Location: University of Nottingham library

Brief description of the project:

We're undertaking this project to find out more about students' views on drinking alcohol and their experiences with alcohol. You've been selected as you told us you don't drink alcohol. We're going to start by talking about your views on alcohol in general and then go on to talk about the things you do socially, then what you've been doing during the time you've spent at university so far.

Confidentiality statement:

I would like to reassure you that all data you provide will be kept strictly confidential by myself. I will be voice recording this interview, any quotes from this recording used in my thesis and any other reports will not identify you in any way. Your participation is entirely voluntary and you are free to withdraw at any time without giving a reason.

About the interview:

I'll be asking you a few questions about your opinion on alcohol. We are exploring your opinion and views so would like to encourage you to talk as freely as possible. The purpose of the interview is not to make any judgements about what you say, it's an exploration of your views. Don't be put off by me not sharing my opinion, or making notes, I'm still listening!

4. Ask the participant if they have any questions before starting the interview
5. Check they have read the information sheet
6. Check still happy to take part and ask them to sign the consent form

General views of drinking alcohol

1. Can you tell me your reasons for not drinking alcohol?
    a. Have you ever drunk alcohol? Reason for not anymore

2. Can you tell me about your opinion on drinking alcohol, in general?
    a. How might you describe the alcohol culture in the UK?

        Prompt: do you think drinking alcohol is a problem in the UK?

    b. How would you describe the drinking culture in your age group?

        Probes: at school; differences in university students vs. those at work

3. Can you tell me what you know about the UK alcohol guidelines?

    Prompts: units, units in different drinks, safe drinking levels

    a. What do you know about the general harms of drinking?

        Prompts: health harms, social consequences, short vs. long term consequences

Social life/ expectations before university

4. Before you came to university, can you describe what kind of things you did socially?

    Who with, how often, why

    a. Were there any occasions where your friends drank alcohol socially but you did not?

        Why did you attend such events, how much did alcohol feature, how did you find these types of events?

5. Before you came to university, did you have any expectations of what the alcohol culture would be like during freshers' week/generally at university?

    a. How did you expect you would fit into this culture?

    b. Can you describe what the alcohol culture is like now you have arrived at university?

6. Before you came to university, what were your expectations of the social activities you would do during fresher's week?

    a. What types of social events did you expect you would go to? Why?

    b. What kind of social events were you hoping to go to? *Explore any differences between hopes & expectations.*

<u>Social life during university freshers' week</u>

7. Can you describe what types of things you did socially during your first week at university?

    Probes: Who with, where, when

    a. Why did you decide to attend this type of social occasion?

        Probes: to make friends, enjoyable, no other non-alcohol occasions on; all my friends attended even though it was alcohol-based

    b. What was your opinion of the events available during Fresher's week?

        iv. Was there anything you would like to be improved?

        Probes: balance of alcohol and non-alcohol based events, variety of non-alcoholic event - how often they occur, advertising/promotion of them, suggestions of types of events

8. If they mention going to alcohol-based socials / did you attend any social occasions that were based around drinking alcohol at all?

    a. If yes, can you describe the event to me?

        Who with, were they drinking (how much, why did they drink alcohol? Awareness of units consumed)

    b. What were others drinking?

        Probe views on friends drinking

    c. Why did you decide to attend this particular event?

    d. What did you think of the event?

    e. Would you attend this type of event again, and why?

9. [If not mentioned at all] Have you been around any friends or other people who are drinking alcohol in other places during freshers' week?

    At social events, in accommodation

        i. How have you found that experience so far?

        ii. Any negative effects of others drinking (being left out of group events, disturbed when sleeping, etc.)?

8.13 Student interview guide – drinker time point 2

Interview guide

December 2016

-A- Participants

Interviewer: Amy Fuller

Interviewee: -A- participant

Location: Telephone/University of Nottingham library

Brief description of the project:

We're undertaking this project to find out more about students' views on drinking alcohol and their experiences with alcohol. Following on from the first interview you took part in, we're going to be talking about your views on alcohol and the things you have been doing socially over your first semester at the University.

Confidentiality statement:

I would like to reassure you that all data you provide will be kept strictly confidential by myself. I will be voice recording this interview, any quotes from this recording used in my thesis and any other reports will not identify you in any way. Your participation is entirely voluntary and you are free to withdraw at any time without giving a reason.

7. Ask the participant if they have any questions before starting the interview
8. Check still happy to take part

Drinking behaviour and experiences during term time

During the last interview we talked about the social events during Freshers' week, and you said you attended… *refer to student profile*

1. Tell me about the social groups you are a part of?
    a. To what extent has this changed since Freshers' week?

2. Tell me about what kind of things you've been doing socially since Freshers' week ended?

    a. Did any of these involve drinking alcohol?

    vii. Can you describe the [name of event] to me?

    Who with, where, when

    viii. Why did you decide to attend this event?

    Friends, sports/societies events, relaxing/enjoyable, expected to attend these type of events

    If mention sport clubs or societies – unpick importance of attending such an event

    ix. Did you have any expectations of what the event would involve before it started?

    Probe: any plans on how much/type of alcohol they would drink

    x. To what extent did alcohol feature in this event?

    xi. Can you tell me about how many alcoholic drinks you had?

    Unpick how normal or excessive this may have been

    Awareness of units consumed, compare to UK guidelines and see what they think

    xii. Can you tell me about the people you were with and what they drank?

    Unpick their behaviour, students' views on friends drinking, do they think it had an impact upon their own drinking – in what way?

Check if there were any other social occasions they attended that involved drinking alcohol (typical or special occasions)

3. Did you have any particularly negative experiences with alcohol over the past two months?
    a. Were there any consequences to this experience?
    b. How do you feel about it?
    c. To what extent has this changed what you drink?

4. To what extent do you think the experiences you've had at university would have differed if alcohol wasn't a part of them

5. What is your opinion of the events/social opportunities available at University?

    Probes: balance of alcohol and non-alcohol based events, variety of non-alcoholic event - how often they occur, advertising/promotion of them, suggestions of types of events

    Compared to freshers' week

6. How would you describe what the drinking culture is like at the University during the term time?

    Compared to freshers' week

    Unpick how the participant feels about this

<u>Students' alcohol consumption</u>

7. How would you describe your drinking behaviour since Freshers' week?
    a. Compared to freshers' week
    b. Compared to before university

8. What do you think about how much you drink?
    In comparison to the guidelines?

9. Thinking about your friends or people you know at university, how would you describe their drinking behaviour?

   Probe their thoughts on friends' drinking

10. To what extent do you feel the social groups you are a part of influence how much you drink?

<u>Managing drinking at university</u>

11. Have you seen or been given anything about drinking alcohol at university , such as staying safe when drunk or managing how much you drink?

    c. If yes, can you describe it?

       Can you tell me how you used it?

       Did you find it useful?

       Did it change how you [insert relevant behaviour according to material]?

    d. If no, would you have liked to have been given any advice or information about drinking at university? Why?

       In what form would you like this information, when would you like to receive it?

    e. How do you feel about how the University manages drinking – the extent to which they manage or strive to reduce it

    f. To what extent do you think that drinking is a problem among students at the University?

        a. Who do you feel has a responsibility to address this problem?

        b. How do you think they might go about it?

8.14 Student interview guide – abstainer time point 2

Interview guide

December 2016

-B- Participants

Interviewer: Amy Fuller

Interviewee: -B- participant

Location: Telephone/University of Nottingham library

Brief description of the project:

We're undertaking this project to find out more about students' views on drinking alcohol and their experiences with alcohol. Following on from the first interview you took part in, we're going to be talking about your views on alcohol and the things you have been doing socially over your first semester at the University.

Confidentiality statement:

I would like to reassure you that all data you provide will be kept strictly confidential by myself. I will be voice recording this interview, any quotes from this recording used in my thesis and any other reports will not identify you in any way. Your participation is entirely voluntary and you are free to withdraw at any time without giving a reason.

- Ask the participant if they have any questions before starting the interview
- Check still happy to take part

Drinking behaviour and experiences at university during term time

9. Can I just check, do you still not drink alcohol at all?

   If they have started drinking, probe what triggered that

During the last interview we talked about the social events during Freshers' week, and you said you attended… *refer to student profile*

10. Tell me about the social groups that you are a part of?
    a. To what extent has this changed since Freshers' week?

11. Can you describe what types of things you have been doing socially since Freshers' week?

    Probes: Who with, where, when

    a. Why did you decide to attend this type of social occasion?

       Friends, sports/societies events, relaxing/enjoyable, expected to attend these type of events

       If mention sport clubs or societies – unpick importance of attending such an event

    b. Did you have any expectations of what the event would involve before it started?

    c. How did you find the event?

12. Have you attended any social events/occasions that were based around drinking alcohol at all?

    a. If yes, can you describe the event to me?

       Who with, where, when

    b. What were others drinking?

       Probe views on friends drinking

    c. Why did you decide to attend this particular event?

    d. What did you think of the event?

e. What do you think about attending this type of event again, and why?

f. Have you ever felt tempted to try alcohol at any point?

Check if there were any other social occasions they attended that involved drinking alcohol

- With a different social group (course friends, societies/sports club, flatmates, other friends)
- Typical occasions and special occasions

13. [If not mentioned at all] Have you been around any friends or other people who are drinking alcohol in other places during term time?

    At social events, in accommodation

    a. How would you describe their drinking behaviour?

    b. What do you think about their drinking behaviour?

    c. How have you found that experience so far?

    d. Any negative effects of others drinking (being left out of group events, disturbed when sleeping, etc.)?

14. How would you describe what the drinking culture is like at the University during the term time?

    Compared to freshers' week

    Unpick how the participant feels about this

    To what extent do you think this has shaped your experiences at university so far?

15. What is your opinion of the events available at University?

    Probes: balance of alcohol and non-alcohol based events, variety of non-alcoholic event - how often they occur, advertising/promotion of them, suggestions of types of events

    Compared to freshers' week

16. Have you seen or been given anything about drinking alcohol at university , such as staying safe when drunk or managing how much you drink?

g. If yes, can you describe it?

   Do you think it would have any impact upon other people's [insert relevant behaviour according to material]?

h. If no, do you think there is a need for advice or information about drinking at university? Why?

   In what form would you like this information, when would you like to receive it?

i. Do you feel that drinking is a problem among students at the University?

    a. Who do you feel has a responsibility to address this problem?

    b. How do you think they might go about it?

8.15 Student interview guide – drinker time point 3

Interview guide

June 2017

-A- Participants

Interviewer: Amy Fuller

Interviewee: -A- participant

Location: Telephone/University of Nottingham library

Brief description of the project:

We're undertaking this project to find out more about students' views on drinking alcohol and their experiences with alcohol. Following on from the first interview you took part in, we're going to be talking about your views on alcohol and the things you have been doing socially over your first semester at the University.

Confidentiality statement:

I would like to reassure you that all data you provide will be kept strictly confidential by myself. I will be voice recording this interview, any quotes from this recording used in my thesis and any other reports will not identify you in any way. Your participation is entirely voluntary and you are free to withdraw at any time without giving a reason.

17. Ask the participant if they have any questions before starting the interview
18. Check still happy to take part

Drinking behaviour and experiences during term time

We are going to talk about what you have been up to since we last spoke, thinking mainly about this second semester, and how alcohol has been a part of that. And there are a couple of questions reflecting on your first year at university at the end.

12. Since we last spoke, can you tell me about what kind of things you've been doing socially?

    a. Did any of these involve drinking alcohol?

    xiii. Can you describe the [name of event] to me?

    Who with, where, when

    xiv. Why did you decide to attend this event?

    Friends, sports/societies events, relaxing/enjoyable, expected to attend these type of events

    If mention sport clubs or societies – unpick importance of attending such an event

    xv. Did you have any expectations of what the event would involve before it started?

    Probe: any plans on how much/type of alcohol they would drink

    xvi. To what extent did alcohol feature in this event?

    xvii. Can you tell me about how many alcoholic drinks you had?

    Unpick how normal or excessive this may have been

    Awareness of units consumed, compare to UK guidelines and see what they think

    xviii. Can you tell me about the people you were with and what they drank?

    Unpick their behaviour, students' views on friends drinking, do they think it had an impact upon their own drinking – in what way?

13. Have there been any other occasions where you drank a lot more than normal?
    a. *Christmas, special celebrations, end of exams*

14. What is your opinion of the events/social opportunities that have been available to you at University this term?

Probes: balance of alcohol and non-alcohol based events, variety of non-alcoholic event - how often they occur, advertising/promotion of them, suggestions of types of events

Celebratory events, end of year events

15. How would you describe what the drinking culture was like at the University this term?

    Compared to previous term

    Unpick how the participant feels about this

<u>Students' alcohol consumption</u>

16. How would you describe your drinking behaviour since we last spoke?

17. Looking back at your first year, what are your thoughts on how you drink?

    Quantity/frequency

    In comparison to the guidelines?

18. Have you had any negative experiences because of what you drank since we last spoke?

    d. Were there any consequences to this experience?

    e. How do you feel about it?

    f. To what extent has this changed what you drink?

19. Thinking about your friends or people you know at university; how would you describe their drinking behaviour?

    Probe their thoughts on friends' drinking

20. To what extent do you feel the social groups you are a part of influence how much you drink?

Reflecting on year, ways to promote responsible drinking

21. Looking back over your first year, can you tell me about the importance of these experiences where you have been drinking and been drunk for you?

    What intentions do you have in terms how often and how much you will drink in the future, summer/second year?

22. Thinking about the experiences you've had in your first year of university, what advice about drinking would you give to the first-year students starting in September?

    How does that differ to advice you were given?

23. Do you have any thoughts on ways that the university could promote responsible drinking?

8.16 Student interview guide – abstainer time point 3

Interview guide

June 2017

-B- Participants

Interviewer: Amy Fuller

Interviewee: -B- participant

Location: Telephone/University of Nottingham library

Brief description of the project:

We're undertaking this project to find out more about students' views on drinking alcohol and their experiences with alcohol. Following on from the first interview you took part in, we're going to be talking about your views on alcohol and the things you have been doing socially over your first semester at the University.

Confidentiality statement:

I would like to reassure you that all data you provide will be kept strictly confidential by myself. I will be voice recording this interview, any quotes from this recording used in my thesis and any other reports will not identify you in any way. Your participation is entirely voluntary and you are free to withdraw at any time without giving a reason.

- Ask the participant if they have any questions before starting the interview
- Check still happy to take part

Drinking behaviour and experiences at university during term time

1. Can I just check, do you still not drink alcohol at all?

   If they have started drinking, probe what triggered that

2. Since we last spoke, can you tell me about what kind of things you've been doing socially?

   Probes: Who with, where, when

   a. Why did you decide to attend this type of social occasion?

   Friends, sports/societies events, relaxing/enjoyable, expected to attend these type of events

   If mention sport clubs or societies – unpick importance of attending such an event

   b. Did you have any expectations of what the event would involve before it started?

   c. How did you find the event?

3. Have you attended any social events/occasions that were based around drinking alcohol at all?

   g. If yes, can you describe the event to me?

   Who with, where, when

   h. What were others drinking?

   Probe views on friends drinking

   i. Why did you decide to attend this particular event?

   d. What did you think of the event?

   e. What do you think about attending this type of event again, and why?

   f. Have you ever felt tempted to try alcohol at any point?

4. [If not mentioned at all] Have you been around any friends or other people who are drinking alcohol in other places during term time?

   At social events, in accommodation; how often

   a. How would you describe their drinking behaviour?

b. What do you think about their drinking behaviour?

c. How have you found that experience so far?

d. Any negative effects of others drinking (being left out of group events, disturbed when sleeping, etc.)?

5. How would you describe what the drinking culture has been like at the University during the term time?

   Unpick how the participant feels about this

   To what extent do you think this has shaped your experiences at university so far?

6. What is your opinion of the events available at University?

   Probes: balance of alcohol and non-alcohol based events, variety of non-alcoholic event - how often they occur, advertising/promotion of them, suggestions of types of events

<u>Reflecting on year, ways to promote responsible drinking</u>

7. Looking back at your first year, how have you found being a non-drinker at university?

   What intentions do you have for the future regarding drinking?

8. Thinking about the experiences you've had in your first year of university, what advice about drinking would you give to the students starting in September?

   How does that differ to advice you were given? Where was that advice from?

9. Do you have any thoughts on ways that the university could promote responsible drinking?

8.17 Staff interview guide

Title of project: Exploring stakeholders' views of the alcohol culture at university

Name of interviewers: Amy Fuller

University Staff Interview Guide

Aims and Objectives

1. To explore stakeholders views of student drinking
2. To explore stakeholders views of how to manage student drinking

Introduction

- Explain the purpose of the interview in general.
- We would like to hear your honest views on student drinking and how to manage this.
- Statement on confidentiality, right to withdraw consent, recording of the interview.

We would like to reassure you that all data you provide will be kept strictly confidential by the research team. The voice recording of this interview and any quotes used in study reports will not identify you in any way. Your participation is entirely voluntary and you are free to withdraw at

- Check they have read the information sheet.
- Read information sheet and gain written consent
- Ask if the participant has any questions before starting the interview.
- Check still happy to take part and that consent form has been signed.

Role with students

10. Can you tell me a little about what your role involves?
    a. How does it relate to student welfare?
    b. How much interaction do you have with students?

11. Can you tell me what you know about the types of social events offered to students?
    a. Who tends to organise them?

       Probe – if it is them go to Q3

    b. What do you think of them?
    c. Do you feel they cater for all students?

       Probe – provision of non-drinking focused events

12. If yes, can you describe what types of event you organise
    a. Do any of these involve drinking?
    b. Can you describe the [name of event] to me?

       Who/how many attended, where was it, when was it

    c. Why did you decide to organise these types of events?
    d. To what extent did alcohol feature in this event?

       Probe: importance of alcohol

    e. How often do these types of events take place?
    f. Have there ever been any negative outcomes from these types of events?

       Prompts: violence, injuries, students having to attend A&E, disruptive behaviour during unsocial hours, bad publicity for the university.

    g. Have you ever organised any social events that are alcohol free?

       iii. If not, why not?

What's your opinion on introducing alcohol free events?

iv. If yes, can you describe what these involved?

Probes: Who/how many attended, where, when

iv. Why did you decide to organise this type of event?

v. How often do these types of events take place?

vi. Did you have any feedback from students about the event?

<u>Managing drinking at university</u>

13. How do you feel drinking impacts students?

    Probe – physical, mental, safety, financial

14. Are you aware of anything being done by the University or Students' Union in relation to student drinking? E.g. staying safe when drunk, managing how much you drink, policies relating to student drinking?

    a. If yes, can you describe it?

       What do you think about this?

       What impact did you think this had upon [relevant behaviour]?

    b. If no, what do you think about this?

15. Whose responsibility do you think it is to address student drinking?

    University, Students' Union, students, student leaders, people/organisations outside the university

    a. How effective do you feel they have been in doing this to date?

    c. How do you think should continue/begin to address this issue?

       Probe: ideas of what could be done

       Do you think there might be any barriers to doing this?

       Do you think there might be any facilitators to doing this?

d. Do you feel you have a role in promoting responsible student drinking?

   Why is that?

   Can you describe what you could do?

   What do you hope the outcome of doing this would be?

8.18 Staff participant information sheets

Department of Epidemiology & Public Health

School of Medicine

Participant Information Sheet

Final version 2.0: 20.06.2016

Title of Study: *Exploring stakeholders views of alcohol consumption at university*

Study ID – Student drinking study

Name of Researcher(s): Amy Fuller, Lisa Szatkowski, Manpreet Bains, Kate Fleming, Rachael Murray

We would like to invite you to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you. One of our team will go through the information sheet with you and answer any questions you have. Talk to others about the study if you wish. Ask us if there is anything that is not clear.

What is the purpose of the study?

This study will help us to understand views of drinking alcohol at university from a stakeholder's perspective. We want to hear your views about student drinking behaviour and ways to manage this. In the long run this will help us to develop suitable policies and

interventions for managing alcohol consumption at the University to help reduce harmful drinking and improve the student experience.

Why have I been invited?

As you are a key member of staff responsible for student experience and student welfare, or a student leader in an elected role at the University of Nottingham, we would like to invite you to take part in a short interview to help us gather views on managing drinking at university. We are inviting up to 20 participants like you to take part.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason (to students – this will not have any negative repercussions on your course of study). However, any information you have already given might be used in the study write-up, but this will not identify you in any way.

What will happen to me if I take part?

If you are happy to take part a member of the research team will arrange an interview at a convenient time for you. Interviews will be carried out either on the telephone or face-to-face in a private room at a University library or Academic building to suit you. The interview will cover topics such as your view on the alcohol culture at university, whether there is a need to manage student drinking and barriers and facilitators to doing so. A digital recorder will be used to record interviews so that the interviewer does not have to take notes and can focus on what is being said by participants. Interviews will take up to one hour. What you say might

be used in the study write-up, but you will remain anonymous and information will not identify you in any way.

What are the possible disadvantages and risks of taking part?

There are no foreseeable disadvantages of taking part.

What are the possible benefits of taking part?

The information we get from your participation in this study will be invaluable to help us understand your views on your role in managing student drinking and how to do so. With your help, we hope to develop interventions so that we can reduce harmful drinking and/or improve the student experience.

Will my taking part in the study be kept confidential?

We will follow ethical and legal practice and all information about you will be handled in confidence.

If you join the study, some parts of the data collected for the study will be looked at by authorised persons from the University of Nottingham who are organising the research. They may also be looked at by authorised people to check that the study is being carried out correctly. All will have a duty of confidentiality to you as a research participant and we will do our best to meet this duty.

All information which is collected about you during the course of the research will be kept **strictly confidential**, stored in a secure and locked office, and on a password protected database. Any information about you which leaves the institution will have your name

removed (anonymised) and a unique code will be used so that you cannot be recognised from it.

Your personal data (e-mail address, telephone number) will be kept for up to one year after the end of the study so that we are able to contact you to share the findings of the study. All interview data will be kept securely for 7 years.

After this time your data will be disposed of securely. During this time all precautions will be taken by all those involved to maintain your confidentiality; only members of the research team will have access to your personal data.

What will happen if I don't want to carry on with the study?

1. Your participation is voluntary and you are free to withdraw at any time, without giving any reason. If you are a student, this will not have any negative repercussions on your course of study.
2. However, any information you have already given might be used in the study write-up, but this will not identify you in any way.

What will happen to the results of the research study?

Interview data will be analysed by the research team before being reported. The results will be written as part of lead researcher's PhD thesis and may be presented in appropriate scientific journals and at conferences. All references to participants or quotes in the thesis or subsequent publications and presentations will be anonymous. Audio-recordings and transcripts of interview data will be kept securely on password-protected computers in a secure office. If you take part in this research, we will be happy to provide copies of these publications to you.

Who is organising and funding the research?

This research is being organised by the University of Nottingham and is being funded by the UK Centre for Tobacco and Alcohol Studies.

Who has reviewed the study?

All research in the University of Nottingham is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by the Faculty of Medicine & Health Sciences (FMHS) Research Ethics Committee.

What if there is a problem?

If you have a concern about any aspect of this study, you should contact either Amy Fuller (PhD student) or Rachael Murray (lead supervisor). Contact details are given at the end of this information sheet. If you remain unhappy and wish to complain formally, you should then contact the FMHS Research Ethics Committee Administrator, c/o The University of Nottingham, School of Medicine Education Centre, B Floor, Medical School, Queen's Medical Centre Campus, Nottingham University Hospitals, Nottingham, NG7 2UH. E-mail: louise.sabir@nottingham.ac.uk.

Further information and contact details

Amy Fuller	**Dr Rachael Murray**
PhD Student	Associate Professor in Health Policy
University of Nottingham	University of Nottingham
Division of Epidemiology and Public Health	Division of Epidemiology and Public Health
Clinical Sciences Building	Clinical Sciences Building

Nottingham City Hospital

Nottingham

NG5 1PB

Tel: 0115 8231350

Email: amy.fuller@nottingham.ac.uk

Nottingham City Hospital

Nottingham

NG5 1PB

Tel: 0115 8231389

Email: rachael.murray@nottingham.ac.uk

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