

The trajectory of first year students' drinking during the transition from home to university and the factors associated with alcohol consumption

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ABSTRACT

Background

Despite recent decreases in young adults' drinking across the UK (ONS, 2018), a subset of the population who still regularly engage in harmful and excessive alcohol behaviours are university students. Whilst there is some published research in the UK on undergraduates' consumption patterns, drinking across the transition to university has generally been overlooked with most studies tending to measure alcohol behaviours across the whole student population. This research explores students' drinking experiences and the impacts of alcohol use across the transition from home to university to gain insight into what drives consumption at university and identify common behavioural drinking patterns. I anticipated that through investigating students' experiences with alcohol during the transitional period, findings could be used to inform the development of future alcohol interventions by identifying new insights for policy makers and developers.

Research Aim

The research presented in this thesis aimed to explore the perceptions, prevalence and factors associated with alcohol use as well as related harms during the move from home to university.

Methodology

A mixed methods approach was adopted, comprising of three studies. The first study involved seven focus group interviews with prospective students from a large urban city in the North West of England (N=46; aged 16 to 20 years). This study was followed by a survey conducted with 221 first year LJMU halls of residence students (aged 18 to 21 years). The survey results were analysed using bivariate and multivariate analysis. The final study involved 11 paired interviews (N=22) with first year LJMU students. Both qualitative strands were analysed using thematic analysis. The data from the three strands were synthesised and contrasted using triangulation.

Results

Overall, the triangulated findings identify the transition to university as a high-risk period for excessive drinking which is associated with an increased risk of negative health and wellbeing outcomes and

alcohol-related harms. The findings indicate that through various sources of information, new students arrive at university with pre-conceived perceptions of a heavy student drinking culture and knowledge around how alcohol can be used to aid successful integration with new peers. Upon entering university, the knowledge and expectations of a heavy student drinking culture obtained prior to arrival are then confirmed through intensive alcohol promotions, new social drinking opportunities and excessive drinking norms which characterise the first few weeks of university.

Conclusion

Evidence presented in this thesis helps contribute to an important gap in the literature as it is one of the only studies to measure UK students' experiences with alcohol across the university transition. Whilst the proportion of young people (16 to 24 years) consuming alcohol has decreased in the UK, the current study provides evidence of a cohort of young people who still regularly engage in high risk drinking often with the specific aim of getting intoxicated. The upward trend of drinking is a concern given the wide-ranging associations with excessive student alcohol consumption and risk of negative consequences and ill-mental health.

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PRESENTATIONS & CONFERENCES

Conferences attended

Attended British Sociological Association, Alcohol Explorations: A Research Methods Workshop, London (27/02/15)

Attended the Liverpool John Moores University, PhD Public Health symposium, Liverpool (01/04/2014)

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Attended the Society for the Study of Addiction (SSA) Annual Symposium, York (05/11/2015-06/11/15)

Attended the Festival for Public Health Symposium, Manchester (01/07/2016)

Attended the Public Health PhD Symposium, Liverpool (7/07/2016)

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Attended the Alcohol Research UK Early Careers Symposium, London (04/04/2017)

Attended the SSA People, Practice and Policy in Alcohol Research Conference, London (05/04/2017)

Oral and poster presentations and blog posts

Poster presentation and 1st prize position: Liverpool John Moores University Faculty Conference, Liverpool (26/07/15)

Poster presentation and 3rd prize position: Liverpool John Moores University Research Day, Liverpool (28/07/15)

Poster presentation: Welsh Branch of the British Psychological Society, Wrexham (12/09/15)

Oral presentation: European Society for Prevent Research (EUSPR), Sixth Annual Conference, Slovenia (24/09/15)

Poster presentation: Alcohol Research UK symposium, Birmingham (15/03/2016)

Oral presentation: Liverpool John Moores Public Health Institute (PHI), Postgraduate evening seminar, Liverpool (28/04/2016)

Poster presentation and 2nd prize position: Festival of Research 'Organic Collaborations', Liverpool (21/06/2016)

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Blog post: EUSPR Early Careers Forum: <https://euspr.hypotheses.org/620> (27/04/2017)

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Oral presentation: Green Tara Nepal, Kathmandu (16/11/2017)

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CHAPTER 1: INTRODUCTION TO THE THESIS

This chapter begins with an overview of the context and background that frames the thesis. Following this, the rationale and significance of this research study is discussed along with the key research questions and mixed methods approach adopted. Finally, this chapter provides a discussion around the research approach and the researcher's positionality.

1.1 The research problem

Alcohol is a major risk factor for disease and premature death, acting as an attributable factor to more than 200 health conditions (World Health Organization [WHO], 2018). Despite recent decreases in young adults' drinking in the United Kingdom (UK) (Office for National Statistics [ONS], 2018), a subset of the population who still regularly engage in harmful and excessive alcohol behaviours are university students (Davoren et al., 2016; Gill, 2002; Heather et al., 2011; Penny & Armstrong- Hallam, 2010). The findings from a recent systematic review (29 studies included) of UK student studies found the proportion of students classifying as hazardous consumers (using the Alcohol Use Disorders Identification Test [AUDIT]¹ scale) ranged between 63% and 84% (Davoren et al., 2016). Despite ongoing attempts to moderate consumption and to minimise associated harms (Bewick et al., 2008b; Foxcroft et al., 2015; John & Alwyn, 2014; National Union of Students [NUS], 2017), British university students continue to have a long tradition of excessive drinking, with reports dating back to the early 1970s (Boland et al., 2006). The multiple acute and chronic outcomes associated with excessive drinking as well as concerns over future drinking trajectories (Bewick et al., 2008a; Mathurin & Deltenre, 2009; Merrill, 2016) have long been discussed within both research and policy literature (Brown, 2016). For example, average volume of alcohol consumption and heavy drinking occasions are partially attributable to many negative health and social outcomes in university students, such as missing class, injury and increased physical and sexual risk (Penny & Armstrong- Hallam, 2010).

Whilst a large body of research documents heavy drinking levels across the student population (Davoren et al., 2016; Gill, 2002; Heather et al., 2011; NUS 2017; Webb et al., 1996), evidence is still unclear as

¹ A 10- item screening tool developed by the WHO to detect alcohol use disorders (Babor et al., 2001).

to whether university students drink at higher levels than their non-student counterparts. While some studies report higher frequency of heavy episodic drinking in students when compared to age matched non-students (Dawson et al., 2004; Kypri, Cronin & Wright, 2005), others indicate a small or insignificant difference (Chen, Dufour & Yi, 2004; Linden-Carmichael & Lanza, 2018; Quinn & Fromme, 2011). The discrepancies reported across study findings make it difficult to determine whether university attendance is in itself a predictor of excessive consumption.

Beginning university is a major transition event in the lives of many young people which presents new experiences and pressures through wider exposure to people and behaviours (Brown, 2016). As young adults move to university, they transition from the relatively controlled setting of further education and the family home to an autonomous environment where they are expected to have greater independence and control over a range of social and health-related behaviours. There are arguably very few other life landmarks which cluster together in such a short space of time (Snow et al., 2003). Although attending university is a normative and rewarding process for most, many students can find this transition stressful due to factors such as separation, new social and academic demands and acquisition of independent living skills (Maggs & Schulenberg, 2005). As a result, many students who enter university do not complete their studies (Higher Education Statistics Agency [HESA], 2017). US research has associated this transitional period with changes in health behaviours, including increasing levels of alcohol use (Baer, Kivlahan & Marlatt, 1995; Borsari, Murphy & Barnett, 2007; Hartzler & Fromme, 2003; LaBrie, Lamb & Pederson, 2009; Sher & Rutledge, 2007; White et al., 2006). It may be that this transitional process is unique to the university setting and associated with a marked increase in excessive and risky drinking. To my knowledge there is no existing data in the UK which monitors students' consumption behaviours across the transition from home to university as well as the associated risk of negative health and behavioural outcomes. There is subsequently a need to explore students' experiences and the impacts of drinking across this potentially critical period of time, to help inform the development of future alcohol interventions.

The initial weeks of university have been identified as a potentially influential time upon young adults' drinking behavior. Freshers' week in particular is renowned for excessive student drinking and signifies intensive alcohol promotion by local retailers, alcohol dominant social events and a relaxed culture of intoxication (Fuller et al., 2017; Riordan, Scarf & Conner, 2015). Although concerns over students' welfare during Freshers' period are widespread, to my knowledge no UK study has monitored first year students' alcohol consumption levels during this period. Drinking rituals and customs established during the initial months of university can continue throughout students' university careers and develop into other patterns of harmful drinking in later adulthood (Bewick et al., 2008a; Mathurin & Deltenre, 2009; Merrill, 2016). Understanding what drives and maintains students' drinking across the transition to university may lead to more appropriate and possibly targeted public health interventions which aim to tackle high risk drinking in the early stages of development and minimise university dropout rates.

There has been a global effort to reduce students' alcohol use across universities (Foxcroft et al., 2015). Historically, these approaches encourage individuals to alter their drinking behaviour through education and motivational techniques and typically use individualised models to theorise the determinants of risk, such as beliefs, motivations, personality and expectancies (Borsari, Murphy & Barnett, 2007; Ham & Hope, 2003). Most of the interventions to date have been met with limited success, often lacking in sustainability (Bewick et al., 2008b; Foxcroft et al., 2015; Kypri et al., 2013; Kypri et al., 2014). Current individual-oriented behaviour strategies fail to take into consideration the complex interactions between individual determinants and the social, local and national environment (Foxcroft et al., 2015). Research suggests that the interplay between individual determinants, social processes and the influencing factors of the university setting have all contributed to the development and maintenance of a culture of normalised drinking across universities (Brown, 2016; Fegley, 2013). With this in mind, this thesis adopts a socio-ecological approach to explore the multi-level influences which underpin students' consumption behaviours during the transition from home to university. The findings from this research can be used to aid the development of local interventions to reduce alcohol use and minimise the harms of drinking within university settings.

1.2 Gaps within the evidence base

Whilst there is some published research in the UK on university students' consumption patterns, drinking across the transition from home to university has generally been overlooked with most studies tending to measure alcohol behaviours across the whole student population (Daveron et al., 2016). Much of the initial research associating increases in alcohol use with university entry emanates from the United States (US) and focuses on the activities of American college students (Borsari, Murphy & Barnett, 2007; Ham & Hope, 2003; LaBrie, Lamb & Pederson, 2009; Sher & Rutledge, 2007). Whilst this work is of some interest, there are substantial differences between US college campuses and UK university settings which compromises our ability to transfer and compare findings across the two nations. Firstly, there is the difference in the legality of drinking; in the UK the legal age for purchasing alcohol is 18 as opposed to 21 in most US states (McAlaney & McMahon, 2007). Secondly, there appears to be wider cultural differences in attitudes towards drinking and drunkenness across the two countries. Past research has demonstrated that students and university officials in the UK hold more permissive attitudes towards intoxication than their US counterparts (Delk & Meilman, 1996). As a result, there is limited understanding of British first year students' drinking levels, customs and rituals practised during the initial months of university. Greater understanding of the nuances, routines and contexts of students' drinking at university is therefore required (such as the structure of a night out, the styles of drinking, and popular drinking venues and events). The implications of understanding drinking in this way is that rather than targeting individual cognitions, tailored health promotion efforts can be developed to disrupt alcohol materials, locations and the meanings of drinking at university (Davies, Law & Hennelly, 2018).

In addition, whilst there is much published quantitative research into students' perceptions of drinking, current literature is limited by the consistent use of discrete quantitative tools to measure complex social and cultural perceptions. A broader and more holistic qualitative approach is therefore warranted to understand the development and underlying perceptions and expectations of drinking within the university context. Greater understanding of students drinking beliefs could arguably create opportunities to challenge, re-frame and modify perceptions at a crucial developmental time-point.

1.3 Contribution of knowledge

This research contributes to an important gap in the literature as it is one of the only studies to measure UK students' alcohol use during the move from home to university. Overall, the findings identify the transition to university as a high-risk period for problem drinking which is associated with an increased risk of negative health and wellbeing outcomes and alcohol-related harms. Upon entering university, typical weekly median unit total increased by 15.5 units (15.9 units prior to university; 31.4 units at university) and an uptake of risky drinking behaviours (such as preloading and drinking games) were observed. The transition to university may therefore present a unique opportunity for university-based interventions which aim to tackle high risk drinking in the early stages of development.

Secondly, the study is among the first of its kind to extensively explore young adults' perceptions of drinking prior to students arriving at university. The findings have provided new insights into how young people conceptualise alcohol's use at university. In my study, through various sources of information, new students arrived at university with pre-conceived perceptions of a heavy student drinking culture and knowledge of how alcohol can be utilised to assist with adjusting to university life. The knowledge and expectations of a heavy student drinking culture obtained prior to arrival were confirmed through intensive alcohol promotions, new social drinking opportunities and excessive drinking norms which characterise the first few weeks of university. The research highlights the significance of pre-arrival alcohol expectations and demonstrates the impact that widely held beliefs have on shaping ideology and influencing drinking behaviour.

In addition, this research provides an original contribution to knowledge by triangulating both qualitative and quantitative approaches to explore students' drinking experiences and the impacts of alcohol across the transition from home to a British university setting. The findings show that for the majority, alcohol featured regularly at university social occasions (62%) and was key to forming new friendships (61%). The qualitative methods were then used to garner new insights into the nuances, routines, and contexts of students' alcohol use on campus. For example, drinking during a night out at university involved social and preparatory activities such as preloading, socialising with friends,

attending flat parties and popular student events and locations. New insight into the extent of students' drinking experiences (Quantitative) as well the context and what drives and maintains alcohol behaviours at university (Qualitative), can be used to inform the development of future alcohol interventions by identifying initiatives for policy makers and developers.

1.4 Introduction to the researcher and the research approach

This research is based on the principles of public health science, with the aim of improving health and reducing the implications of alcohol use within a UK university setting (Baggot, 2011; Mabhala & Wilson, 2009). My role and position within the research programme involved reflecting on my own student identity which began three years prior to starting my PhD journey in 2011. During my student years I moved away from my family home to a university in the North West of England. From the outset, alcohol appeared to be the dominant social offering and was at the centre of most social occasions. Alcohol was used to form new friendships and create laughter and enjoyment; at the time I was unaware of any student that did not drink and few that drank moderately. My interest in the research issue stemmed from the paradoxical relationship of alcohol and student living that I witnessed whilst at university. On the one hand alcohol was heavily promoted around campus and played an important part in new peer relationships and group bonding. However, on the other hand healthy behaviours were promoted by the Student Union and there was pressure to achieve and attain good grades.

My decision to drink at university has inevitably had implications on my perceptions of the student drinking culture which will have informed the development of this research programme (Berger, 2015). Being a recent university graduate meant that I had experienced a similar situation to the participants I was researching. I believe that my age and recent student status lent itself to research as I was able to relate to students' experiences and emotions. I understood the pressures on incoming students to form new friendships and adapt to their new surroundings relatively quickly which can have negative implications on students' mental and social wellbeing. Throughout the research programme, participants openly talked about their anxieties around forming new friends and shared their drunken anecdotes with me. Many of the participants assumed I had knowledge of common student drinking

rituals (e.g. drinking games) and events which proved helpful in initial rapport-building and enabled me to gain insight into students' personal and candid experiences of drinking at university.

An area where my previous experience as a university student could have influenced the outcome of the research was through my interpretations of the implications of the research findings. On a personal note, I viewed university as one of the first instances where young people have the legal and parental freedom to drink and engage in risky behaviours. As a result, temperance is unlikely to have substantial and long-lasting impacts on consumption behaviours especially when the local environment surrounding higher educational institutions permits and encourages heavy drinking norms. Universities do have however some level of responsibility for the welfare of their students and more needs to be done to create a culture of moderate drinking and support for those of whom alcohol is a real problem. In order to reduce the implications that my personal views and experiences had on the research, I was mindful throughout the process that each university has a unique setting. I adopted exploratory methods of investigation such as semi-structured focus groups and interviews and the survey I designed was kept broad as to ensure that my prior knowledge did not influence the outcome of the research.

1.5 PhD overview

The research presented in this thesis aimed to explore the perceptions, prevalence and factors associated with alcohol use as well as related harms during the move from home to university. It was anticipated that through investigating and gaining a better understanding of students' experiences with alcohol during the transitional period the research could help to inform the development of future alcohol interventions by identifying new insights for policy makers and developers. To address this aim, four key research questions were addressed:

1. What are students' pre-existing perceptions of the university student drinking culture and the role that alcohol plays during the transition into university?
2. What are the drinking behaviours of students' transitioning to university?
3. Are students' drinking behaviours before and during the transition to university related to health and social wellbeing?

4. What factors are associated with the trajectory of students' drinking across the transition from home to university?

The research programme was divided into three key studies (see Figure 3); a focus group study with prospective university students, exploring perceptions around drinking at university (Study I); a cross sectional survey conducted on first year halls of residence students, exploring perceptions and the prevalence and impacts of drinking during the transition from home to university (Study II); and a paired interview study with first year university students, exploring perceptions and experiences with alcohol as students transition from home to university (Study III).

The thesis is structured as follows:

Chapter 1: Introduction: This chapter begins with an overview of the context and background that frames the study. Following this, the rationale and significance of this research study is discussed along with the key research questions and mixed methods approach adopted. Finally, this chapter provides a discussion around the research approach and the researcher's positionality.

Chapter 2: Literature Review: This chapter discusses the persistent problem of students' drinking as well as wider relevant areas of research including, the prevalence of drinking within the UK, alcohol-related harm and factors associated with ongoing alcohol use. The chapter also comprises the social ecological model which frames this study.

Chapter 3: Methodology: This chapter provides an overview of the aims, mixed method approaches, and design typologies used. The justification and limitations associated with each of the quantitative and qualitative methods are covered later in the chapter whilst the sampling and data collection methods are discussed in detail in each respective chapter.

Chapter 4: Study I: Within this chapter I present the findings from a focus group study conducted on 46 prospective university students. The methods I used are explained in detail along with a description of the data collected and thematic analysis procedure adopted. The chapter closes with discussion

around how the findings of the study answer the research questions and the strengths and limitations of the research are summarised.

Chapter 5: Study II: This chapter presents the findings from a survey of 221 first year halls of residence students. Here I present a detailed explanation of the research methods used relating to survey design, sampling method, data collection and the univariable and multivariable analysis conducted. The chapter closes with discussion around how the findings of the study answer the research questions and the strengths and limitations of the research are summarised.

Chapter 6: Study III: This chapter presents data collected from interviews with eleven pairs of first year undergraduates (N=22) who had recently transitioned from home to university. The methods I used are explained in detail along with an in-depth description of the data collected and thematic analysis procedure I adopted. The chapter closes with discussion around how the findings of the study answer the research questions and the strengths and limitations of the research are summarised.

Chapter 7: Discussion: The final chapter of the thesis presents the integrated findings from triangulation of the three studies in a mixed methods synthesis. The novel contribution of this thesis and limitations of the research are summarised and opportunities for further investigation and implications of findings for policy and practice are then identified. The chapter closes with overall conclusions.

CHAPTER 2: LITERATURE REVIEW

In this chapter I discuss the ongoing problem of students' drinking as well as wider relevant areas of research including, the prevalence of drinking within the UK, alcohol related harm and factors associated with the excessive use of alcohol in student populations. The literature included within this thesis was obtained through searches conducted using several literature databases, these included Science Direct, Google Scholar and PubMed. Search terms comprised *alcohol, students, transition to university, drinking, preloading, perceptions, attitudes, alcohol-related harms, risk, university, binge drinking, drunkenness, college students, youth drinking*. In addition, through attending local, national, and international conferences such as, the Kettil Bruun Society Symposia, Alcohol Research UK Annual Conference and Society for The Study of Addiction Annual Conference key authors and relevant data sources were identified. The literature included was assessed as to whether it addressed an aspect of one of the four research questions (see Chapter 1). Articles ranked as 'very relevant' included research conducted in a British university setting, on first year university students and conducted less than ten years ago.

2.1 Alcohol use as a global issue

Alcohol is the most widely used drug in the world with almost half (43%) of the global population identifying as current drinkers (defined as having had an alcoholic drink in the last 12 months) (WHO, 2018). However, the prevalence and adverse effects of its use continues to generate major health concerns. Harmful alcohol use ranks amongst the top five risk factors for disability, disease and death throughout the world and acts as an attributable factor to more than 200 health conditions (WHO, 2018). For example, average volume of alcohol consumption and heavy drinking occasions are partially attributable to many acute and chronic disease outcomes including increased risk of developing cirrhosis of the liver, some cancers, cardiovascular disease, diabetes, and injury (Rhem et al., 2017; WHO, 2018). In the most comprehensive estimate of the global burden of alcohol use to date, meta-analysis identified elevated risk of harm even at very low-level thresholds (Wood et al., 2018). Authors estimate that, for one year, drinking one alcoholic beverage a day increases the risk of developing one of the 23 alcohol-related harms measured by 0.5% compared with not drinking at all; suggesting that

the consequences of alcohol are too widespread and varied for there to be such a thing as a safe alcohol limit. It must however be noted that the elevation of risk reported by Wood et al (2018) was exceptionally small. Further, the report measures only for the average risk of the population and fails to measure the scale of absolute risk. This assumption is problematic as individual-level risks vary considerably by genetic profile, age, socio-economic status, wider health-related behaviours and experiences of inequalities (Holmes et al., 2018; Spiegelhalter, 2018). There are also different shaped risk relationships with each health outcome and alcohol consumption (e.g. heart disease and cancer). Therefore, care is needed when interpreting and communicating the risks of harm related to drinking.

The European Union remains the heaviest drinking region in the world, with individual consumption equating to 12.4 litres of alcohol per year (WHO, 2012). Alcohol trends however vary within the region with countries in Central-western, Western, Central-eastern and Eastern areas reporting higher levels of consumption than in Southern Europe and the Scandinavian countries. This is also evident in levels of harm, where alcohol-attributable mortality rates in the first three countries exceed those of Southern Europe and the Scandinavian countries (WHO, 2013). The latest Office for National Statistics (ONS) 'Adults drinking habits in Great Britain' report (2018) reveals that 29 million British adults (aged 16 years and over) consume alcohol (defined as having had an alcoholic drink in the last 12 months); 7.8 million of which drink at levels which pose some risk to health (defined as males who exceeded 8 units of alcohol and females who exceeded 6 units of alcohol on their heaviest drinking day). Although alcohol consumption for individuals and communities fulfils a range of social and pleasure functions, heavy drinking is associated with a myriad of economic, health and social problems (Public Health England, 2016). It has been estimated that the economic burden of alcohol in terms of health, crime and other social problems in the UK amounted to between £27bn and £52bn in 2016 (1.3%-2.7% of GDP) (Public Health England, 2016). Further to this, in 2017 almost 7,697 deaths in the UK were alcohol related making excessive drinking a leading cause of preventable premature mortality (ONS, 2017).

Drinking guidelines have increased in number internationally since the 1980s however, consumption thresholds differ between countries and over time (Holmes et al., 2018). Within the UK the recently revised guidelines stipulate that neither men or women should drink in excess of 14 units of alcohol

over a seven-day period. Additionally, drinkers should not limit their drinking to one single occasion and alcohol should be interspersed with drinking water and eating (Department of Health, 2016). These recommendations come after widespread debate over the preceding drinking guidelines, which set the limits for ‘safe drinking’ as men should not consume more than 21 units within a week and 3-4 units in a day and women no more than 14 units within the week and 2-3 units a day (House of Commons Science and Technology Committee, 2012). Despite recent changes to UK alcohol guidelines, alcohol use within Britain still remains high with recent figures reporting a 5% rise in the number of deaths attributed to alcohol from 2016 (7,327 alcohol attributed deaths) to 2017 (7,697 alcohol attributed deaths) (ONS, 2016; ONS, 2017). Surveys and qualitative research indicate that people typically disregard consumption thresholds due to lack of understanding of units, acceptance of low-level risk and the guidelines being difficult to accommodate within existing drinking practices (Holmes et al., 2018).

2.2 Changing drinking trends in young people

The prevalence of young adults (aged 16-24 years) drinking in the UK has fluctuated over the last 30 years with levels of consumption in this subpopulation increasing during the 1990s to early 2000s and more recent changes revealing a decline in youth engagement in alcohol. From 2005 to 2016 the proportion of young adults (aged 16-24 years) engaging in binge drinking (i.e. consuming >6/8 [females/males] units of alcohol at least once in the week) fell by more than a third, from 29% to 17% (ONS, 2016). Downward drinking trends of young people in the UK align closely with data from other countries (De Looze, et al., 2015; European School Survey Project on Alcohol and Other Drugs [ESPAD], 2015). However, most international studies have examined only underage drinkers (aged 13-16 years) and in the small number of studies where young adults (aged 16-24 years) were included the downward trend was weaker or absent. More evidence is needed to draw firm conclusions as to whether this trend translates globally or is only emergent in UK youth populations.

Many studies have offered explanations of the driving force behind decreasing youth drinking trends in the UK. One common explanation pertains to the socio-demographic changes among youth, which has seen an influx in the number of individuals from ethnic minority backgrounds where non-drinking is

often facilitated (Centre on Dynamics of Ethnicity, 2012; Hurcombe, Bayley & Goodman, 2010). However, drinking levels have fallen among all ethnic groups; in fact, the decline is shown to be greater among young white adults so it is unlikely that this trend can be attributed to UK demographic shifts (Institute of Alcohol Studies [IAS], 2016). Other reports point to economic factors, rise of digital technologies, changing social norms and lifestyle change, however the data is not robust enough to draw any firm conclusions (Oldham et al., 2018). Further insight into the decline in youth drinking and the factors associated with this trend should be provided over the next year thanks to a collaborative study currently being conducted at the University of Sheffield. This study aims to deliver insight into whether decreasing trends are consistent across all sociodemographic subgroups and provide greater understanding into the associations related (Oldham et al., 2018).

Although reports suggest a potential positive change in UK youth drinking habits, a level of caution must be held when interpreting these statistics. For example, the downward drinking trends could reflect, in part, the growing number of young adults abstaining from alcohol which from 2005 to 2016 increased by more than 40%, from 19% to 27% (ONS, 2016). Alongside growing numbers of young people drinking less or abstaining from alcohol, consumption levels are still high among those who drink. In 2016, of those young people aged 16 to 24 in Great Britain who had drunk during the previous week, 33% of men and 27% of women drank more than 12 and 9 units respectively on their heaviest drinking day (NHS Digital, 2018). Young women's alcohol consumption has been a cause for concern of late as research suggests a convergence between the sexes and a relative increase in young women's level of alcohol consumption and frequency of drinking (Fuller & Hawkins, 2015; Slade et al., 2016). A closer look at the statistics for the UK reveals a 3% increase in the number of young women binge drinking² in the past week from 2005 to 2016 (ONS, 2016).

Drinking and drunkenness has rapidly become a normal aspect of UK young adults' social lives and identities (Measham, 2008; Seaman & Ikegwonu, 2010). The cultural acceptance of drunkenness within the UK is reinforced by data which suggests that nearly three quarters (74%) of British adults

² Binge drinking defined as males who exceed 8 units and females who exceeded 6 units on their heaviest drinking day.

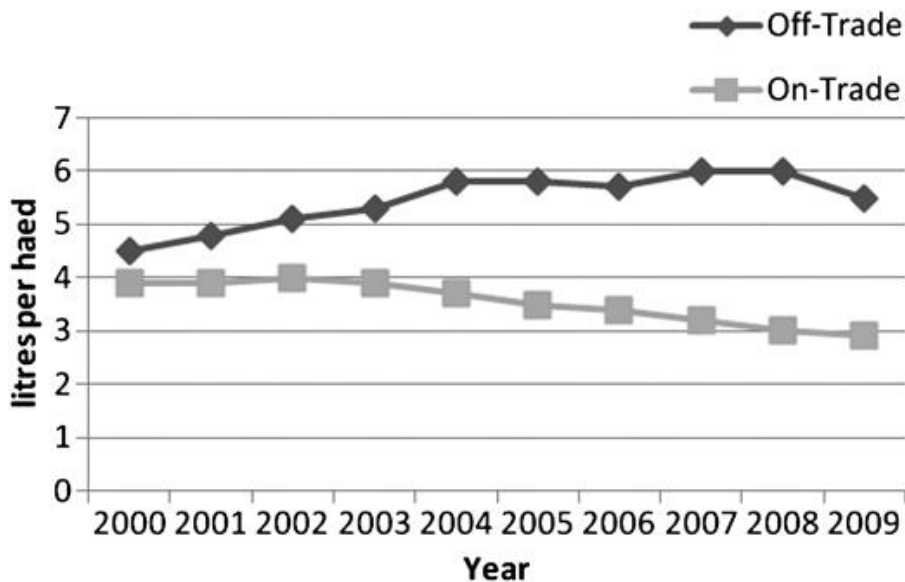
(aged 16-59) feel it is acceptable for their own age group to occasionally get drunk (Home Office, 2014). The pursuit of determined drunkenness holds important social dimensions for young people as intoxication is accompanied by enhanced feelings of togetherness which help to aid socialising and create group cohesion among peers (Fry, 2011; Seaman & Ikegwonu, 2010). Intentional drunkenness is often achieved through distinct practices, such as preloading (also labelled as pre-drinking, pre-partying, pre-gaming, or front-loading), mixing alcoholic drinks and drinking games.

Preloading involves the consumption of alcohol within a private space (usually at home) prior to going out to a commercial venue (typically a bar or club) (Barton & Husk, 2014; Hughes et al., 2008; McCreanor et al., 2016). Although not a new phenomenon, preloading has rapidly become the norm among both underage and legal age young drinkers in recent years and is now an important feature of drinking occasions and ‘nights out’ in the UK (Barton & Husk, 2012; Forsyth, 2010; Measham & Brian, 2005; Pedersen et al., 2013; Wells, Graham & Purcell, 2009). At home drinking practices have been associated with a need to save money as alcohol is often cheaper to purchase at off-licensed premises than at on-licensed locations. Preloading is also practiced as a way of getting deliberately drunk before entering the night-time environment, through reducing social anxiety and allowing for participation in group activities such as dancing without embarrassment (Barton & Husk, 2012; 2014; Griffin et al., 2009). In a focus group study conducted on 70 British 16-21 year olds, participants characterised preloading as an occasion incorporating certain social and preparatory activities, such as socialising with peers, meeting new people, ‘getting ready’ for a night out and taking photographs (Atkinson & Sumnall, 2017).

Although there is limited population data available on the prevalence of preloading in the UK, alcohol sales figures from the Institute of Alcohol Studies (2010) report suggest a rise in at home drinking; findings showing a 40% fall in on-sale alcohol purchases and a 24% increase in off-sales alcohol purchases in the UK from 2000 to 2009 (Figure 1). Research has suggested that preloaders in the UK drink a third or more of the night’s alcohol in a private sphere setting (Barton & Husk, 2012; 2014; Hughes et al., 2008). Within this context, the consumption of alcohol has been associated with higher levels of self-reported drinking and higher levels of intoxication and as a result increased negative health

and social outcomes such as arguments with friends, hangovers, tensions with door staff, aggression, violence, fights and black outs (Barton & Husk, 2012; Foster & Ferguson, 2013; Hughes et al., 2008; LaBrie et al., 2011; Labhart et al. 2013; Pedersen & Labrie, 2007).

Figure 1: UK consumption of alcohol from on and off-licenced traders from 2000–2009



Images by Institute of Alcohol Studies, 2010 and excludes cross-border shopping, smuggling and other illicit consumption.

2.3 Incidence of alcohol consumption among university students

Despite decreases in young adults’ drinking, a subset of the population who still regularly engage in harmful and excessive alcohol behaviours are university students (Davoren et al., 2016; Heather et al., 2011; Gill, 2002; Webb et al., 1996). Due to the nature of the university term time, which sees most university students move from the family home into student hall accommodation, students are a subpopulation who are frequently omitted from official alcohol statistics (ONS, 2018). It is therefore plausible to suggest that general household surveys do not capture university student drinking rates and

we must subsequently rely on university student-based research to explore this demographic's drinking trends.

It must be acknowledged that excessive alcohol use at university is not a new phenomenon; UK university students have a long tradition of heavy drinking with reports dating back to the early 1970s (Boland et al., 2006). In the mid-1990s evidence demonstrated excessive drinking habits among second year students from across ten British Universities (N=3075) with 61% of men and 48% of women exceeding the former weekly guidelines (defined as women should limit their weekly alcohol unit intake to 14 units and males to 21 units) (Webb et al., 1996). Since the opening of Higher Educational Institutions, drinking customs and rituals have been passed down through generations of students, which has reinforced student drinking as a tradition which is now entrenched in the culture of university (National Institute of Alcohol Abuse and Alcoholism [NIAA], 2015). The ongoing high levels of drinking in universities indicates that the culture of drinking at university has shown resistance to public health efforts. Of late, binge drinking amongst the student population has received a great deal of public health interest and media coverage, with headlines from the popular press reporting '*A Degree in drinking: Students booze for 19 hours per week with average sessions lasting SIX hours and costing £2457 a year*' (Daily Mail, 2013). Whilst this discourse of panic may be heightened by tabloid papers, there is increasing concern amongst political and public health officials around the persistently high levels of alcohol use and the myriad of negative health consequences observed amongst the UK student population.

Cross nationally there is evidence to suggest that alcohol consumption may be greater among UK students than their international counterparts. In a study conducted on 17,738 university students from 21 countries (aged 17-30 years), UK students were among the heaviest binge drinkers³ along with students from Ireland, Belgium, Colombia and Poland (Dantzer et al., 2006). Studies carried out within

³Assessed using the measure '*how many drinks did you consume on the days of drinking over the past 2 weeks*'. Participants were categorised as heavy drinkers if they had consumed more than 5 drinks if male and 4 drinks if female in a single occasion.

the UK show that around 90% of students consume alcohol at university (Bewick et al., 2008a; Heather et al., 2011). In a recent systematic review (29 studies included) of UK student studies Davoren and colleagues (2016) found the proportion of students classifying as hazardous consumers (using the AUDIT scale¹) ranged between 62.8% (Snow et al., 2003 (N= 187 first year students attending a single campus university)) and 84% (O'Brien et al., 2014 (N= 2,048 students attending a single campus university)). However, assessment of the accuracy of these findings is problematic as studies range in their methodological approaches and quality of sampling, specifically, in gender, time of year, academic year of study, and method of assessment. Despite these disparities, there is consistent indication that excessive drinking persists within this demographic (Brown, 2016).

Whilst a large body of research documents heavy drinking levels across the student population (Davoren et al., 2016; Heather et al., 2011; NUS, 2018; Penny & Armstrong-Hallam, 2010); evidence is still unclear as to whether university students' drink at higher levels than their non-student counterparts. Whilst some authors report high rates of episodic drinking in students when compared to age matched non-students, (Dawson et al., 2004; Kypri, Cronin & Wright, 2005) others indicate a small or insignificant difference (Chen, Dufour & Yi, 2004; Linden-Carmichael & Lanza, 2018; Quinn & Fromme, 2011). For example, one study utilising US survey data from the National Epidemiologic Survey on Alcohol and Related Conditions-III reported that of the 2,213 drinkers (aged 18-22 years) surveyed, the odds of being a frequent drinker and occasional binge drinking (defined as consuming >8/10 [females/males] drinks in one drinking occasion) was not unique to young adults who attended university (University students, 24.1%; Non-university attenders, 21.31%) (Linden-Carmichael & Lanza, 2018). The discrepancies reported across study findings make it difficult to determine whether university attendance is in itself a predictor of excessive consumption. Therefore, when it comes to developing alcohol strategy it is not clear whether university students are a subset of the population which require a targeted approach to reduce drinking or whether a population level intervention would be best suited to address UK wide youth drinking rates. This uncertainty suggests the need for greater

understanding into university students' pre and post arrival drinking experiences to identify any shifts in consumption behaviours once students transition into the university setting.

2.3.1 Student drinking habits

Within the wider field of students' drinking, emphasis is given to undergraduates' consumption rates and drinking occurrence (Davoren et al., 2016; Gill, 2002). However, a growing body of research posits that the way in which individuals drink and the practices they engage in are equally important (Borsari, Murphy & Barnett, 2007; Haas, Smith & Kagan, 2013; Zamboamga et al., 2010). Similar to the drinking behaviours of the wider UK youth population, students engage in high risk consumption styles, such as preloading, drinking games, initiations, and pub crawls (Haas, Smith & Kagan, 2013).

The commonality of preloading among university students illustrates the cultural shift over recent years which has seen the growth of at home rather than public drinking (Hughes et al., 2008; IAS, 2010; Jayne, Valentine & Holloway, 2011). Evidence indicates increased levels of preloading in student populations with as many as 90% of student drinkers reporting home consumption before entering the nightlife environment (Quigg, Hughes & Bellis, 2013), which is much greater than the reports of regular nightlife users reported elsewhere (58% preloaded prior to arriving in the night-time economy [NTE]) (Hughes et al., 2008). The practice of preloading at university often involves ritualised games which test players' drinking speed and endurance. As other research has confirmed, drinking games are inherently risky with most including mixing alcoholic drinks and racing or nominating others to finish their drink quickly (Borsari, 2004; Haas, Smith & Kagan, 2013; Kenney, Hummer & LaBrie, 2010; Zamboanga et al., 2010). Within US colleges, drinking games have become a universal aspect of excessive drinking on campuses with 50–62% of students reporting game play in the past month (Clapp, Reed & Ruderman, 2014; Barton & Husk, 2012; Haas, Smith & Kagan, 2013). Engagement in drinking games has been correlated with negative drinking outcomes. In one study conducted on 1,725 student drinkers in the US, participants who reported game play were 1.59 times more likely to report experiencing a drinking-related problem than participants who did not play (Clapp, Reed & Ruderman, 2014). Although it must be noted that drinking related problems in this study were measured subjectively and therefore the absolute risk of game participation is still unclear.

Sport teams in particular have a reputation for excessive and ritualised drinking behaviours. For example, in a UK study conducted on 770 undergraduates from seven UK universities, higher drinking levels were reported among sport team members (Median AUDIT score of 11.5) when compared to non-participants (Median AUDIT score of 11) (Partington et al., 2012). One society-led drinking ritual renowned for excessive and risky drinking practices are initiation ceremonies. These events welcome new members to the group by putting them through difficult challenges, including excessive drinking in order to confirm membership (Groves, Griggs & Leflay, 2012). The pervasive practice of initiation ceremonies is widely reported in the British media. Reported incidents include students drinking their own vomit, dressing in humiliating outfits and being put through excessive drinking challenges (The Tab, 2014). In one recent and unfortunate case, an initiation held by students in the North East of England led to the death of a male first year student (BBC, 2018). These risky practices have raised concerns across the university sector as institutions strive to uphold a duty of care to their students. Subsequently, some universities have banned initiation ceremonies, which has led student-led groups to organise these events secretly.

Understanding alcohol as a tool used for achieving drunkenness within the university setting has implications for education programmes constructed with the aim of reducing alcohol (Brown, 2016). Current public health initiatives have been criticised for focusing on the harms and risk associated with drinking and not giving sufficient attention to the pleasures and social benefits associated with intoxication (Fry, 2011; Harrison et al., 2011). For example, if the purpose of drinking is to get drunk, messages of restraint and promotion of sensible drinking may have limited impact. There is limited research which explores the drinking practices and rituals practiced by students within UK universities. Greater understanding of the nuances, routines, and contexts of students' drinking at university is required, such as the structure of a night out, styles of drinking, drinking venues and popular events. The implications of understanding drinking in this way is that tailored health promotion efforts can be developed to disrupt key components of drinking such as the materials, location and meaning (Blue et al., 2016; Davies, Law & Hennelly, 2018; Supski et al., 2017).

2.3.2 Issues with the quality of student-based alcohol research.

Across the field, quantitative measures appear to be the dominant research tool used to monitor students' alcohol behaviour at university. However, assessment of the accuracy of these findings is problematic as studies range in their methodological approaches and quality of sampling; specifically, in gender, academic year of study, time of year and method of measurement (Brown, 2016).

Selection bias is the most prominent issue identified across UK cross-sectional student studies (Davoren et al., 2016). A range of populations have been utilised in the field, including course specific samples (medical and psychology students more commonly) and male only populations (Black & Monrouxe, 2014; Heather et al., 2011; Snow et al., 2003; Underwood, Fox & Manogue 2009). When the sampling frame is narrow, such as studies which focus solely on medical professionals (Boland et al., 2006; Black & Monrouxe, 2014; Newbury-Birch et al., 2002), there is concern that the sample does not represent the wider student population and therefore reproducibility and external validity is compromised. Discrepancies in students' alcohol use can be seen across the literature. For example, in John & Alwyn (2014) binge drinking rates⁴ among first year students enrolled at three universities in Wales (N=374) were reported at 85%. While Watson et al (2006) documented much lower binge drinking rates⁴ (55%) in first year nursing and midwifery students attending a single university in Scotland (N=186).

Further, discrepancies across the field may be partially explained by investigations into differing time points across the academic year. Anecdotal evidence suggests that pre and post examination periods and freshers' week⁵ are times when hazardous drinking is more likely. Therefore, those studies reporting on alcohol usage during these time-points are unlikely to represent typical drinking trends (Gill, 2002). In a similar vein, there is evidence to suggest that the level of study plays a crucial role on student consumption behaviours. For example, one study including 5,895 undergraduates who attended a university in the North of England, identified highest levels (18.9 units of alcohol during a typical university week) of alcohol consumption in their first university year, a time where individuals have

⁴ Defined by consuming >6/8 [females/males] units of alcohol in one drinking session at least once in the week.

⁵ Freshers' period is a length of time (varies depending on the university) in which first year students are welcomed to the institution through invitations to a variety of different events, which are usually held in bars and nightclubs.

reduced parental monitoring, new independence and increased social demands. The corresponding figures for years two and three were 16.06 units and 13.89 units (during a typical university week), respectively. The lower levels of alcohol use in years two and three could potentially be attributed to increased workload and final year exams, respectively (Bewick et al., 2008a). It therefore may not be sensible to combine student samples from across academic years as the student experience varies considerably.

Lastly, a broad, and varied number of screening tools have been utilised in the field to measure harmful and non-harmful consumption in student populations, these include alcohol units and tools such as CAGE⁶, AUDIT⁷, and Fast Alcohol Screening Test [FAST]⁸ (Davoren et al., 2016). Heather et al., (2011) adopted the AUDIT to measure alcohol behaviours among undergraduates (N=770 students from two universities in the North of England) and identified 11% of students classified as harmful drinkers (AUDIT score of 16–19) and 10% were deemed to be ‘probably alcohol dependent’ (AUDIT score of 20+). El Ansari et al (2011) utilised the CAGE test (N=3,706 students from seven universities in England, Wales and Northern Ireland) and reported that 23.1% of the study population identified as ‘problem drinkers’ (score of 2 or more). The drinking period selected for investigation also differs across studies, with some reports using monthly time frames and others weekly or daily (De Visser & McDonnell, 2012; El Ansari & Stock, 2010). Adopting different screening tools and time frames has made the synthesis and interpretation of findings among British student studies extremely difficult.

2.4 Implications of alcohol consumption among university students

The levels of alcohol consumption observed in both UK and international student populations have been associated with multiple short-term and long-term adverse outcomes. Although not explicit to university students, reports of negative outcomes of drinking at university are common. Some of the short-term health-related implications of heavy and frequent drinking are identified in a study conducted at a

⁶ A shortened version of the AUDIT, this 4-item survey screens for problem drinking and potential alcohol problems (Ewig, 1984)

⁷ A 10- item screening tool developed by the WHO to detect alcohol use disorders (Babor et al., 2001).

⁸ A shortened version of the AUDIT, this 4-item screening tool was developed for busy clinical settings to measure alcohol misuse (Hodgson et al., 2002)

Southern university in England. Of the 724 students that participated, 15% had had unprotected sex, 31% had been involved in an argument, 32% had missed a university class and 23% had injured themselves as a consequence of drinking in the last year they had been at university (Penny & Armstrong-Hallam, 2010). Other studies have consistently pointed to close links between excessive alcohol use and an increased risk of sexual assault (Gilmore et al., 2015; Testa & Livingston, 2009).

The longer-term implications of high levels of alcohol use at university are implied by associations between student alcohol use and impeded academic performance (Mustaine & Tewksbury, 2005; El Ansari, Stock & Mills, 2013; Osain & Alekseevic, 2010). In a study involving UK medical students (N=169), 36.8% of males and 58.2% of females considered that their academic performance had been affected by alcohol consumption on at least one day in the last month (Pickard et al., 2000). Further to academic implications, there is a large evidence base attesting association of late adolescent drinking on adult drinking and health behaviours. However, due to weaknesses in design most of these studies cannot support casual inferences (see systematic review; McCambridge, McAlaney & Rowe, 2011). In a Swedish single population-based cohort, late adolescent heavy drinking (defined as >250 g/week) was associated with early death among adult men (N=49,464), principally through car crashes and suicides (Andreasson, Allebeck & Romelsjo, 1988; Andreasson & Allebeck, 1991).

Drinking rituals and customs established during the first year of university can continue throughout students' university careers (Bewick et al., 2008a; Riordan, Scarf & Conner, 2015), where the initiation of heavy drinking can encumber successful adaptation to university life (Maggs & Schulenberg, 2005; LaBrie, Lamb & Pederson, 2009). Evidence presented in a UK longitudinal study conducted on 225 undergraduates identified that those who reported drinking above low levels (14+ units for females and 21+ units for males) were 10 times more likely to continue drinking above low levels at year three (Bewick et al., 2008a). However, it is important to note that only a small proportion of those who took part in the baseline survey responded to all three surveys. It is therefore possible that the behaviour of those who did not engage with the full study differ from those who did engage. Despite these limitations, addressing excessive consumption behaviours among individuals during the student years may pose an important opportunity to cultivate more moderate alcohol behaviours and reduce health risk in later life

stages. Alongside high levels of alcohol use there is a clustering of health compromising behaviours reported by students during the transition from home to university. Studies illustrate that physical activity declines (Buscemi et al., 2011) and many students do not achieve healthy nutrition targets (El Ansari et al., 2011).

2.5 Factors associated with students' alcohol use

Research identifies university as a complex setting in which heavy drinking is associated with many causal influences (Brown, 2016; Ham & Hope, 2003; Penny & Armstrong-Hallam, 2010). This will now be demonstrated through the identification of multiple factors associated with the development and maintenance of harmful students' drinking which have been identified across the literature. Several models have been theorised to explain drinking behaviour, however as alcohol use is multifactorial no single theory can be used to explain the complexity of drinking within the university context. Therefore, the following section reviews the most cited and relevant factors correlated to excessive student drinking.

2.5.1 Wider context of youth drinking

Although national reports illustrate a downward trend in youth drinking (ONS, 2018), young people in today's society still continue to use alcohol as a tool for getting drunk (Seaman & Ikegwuonu, 2010). The ongoing issue of heavy youth drinking suggests that awareness and understanding of wider cultural norms are essential in order to fully conceptualise the problem of drinking within UK universities.

Young adults entering university in the UK today are doing so in a different alcohol environment than previous generations. A closer look at the history of public drinking demonstrates significant changes to the landscape of British nightlife environments and the attitudes of UK drinkers in the last three decades (Bailey, Griffin, & Shankar, 2015; Measham, 2008; Measham & Brain, 2005). In the late 1980s Britain saw the beginning of the acid house and rave scene, which led many young people away from alcohol-based pubs and nightclubs. It was during this time that alcohol was redeveloped and recommodified as a "psychoactive" product in an attempt to broaden its customer base and increase

appeal of young consumers. Several changes were made to alcohol products, including higher strength alcoholic drinks, ready to drink mixers and buzz drinks (which include legal stimulants such as caffeine) and shots (Measham, 2008). The recommodification of alcohol together with an influx of new style bars such as city-centre café bars and themed pubs aimed at young people began to transform British towns and cities. These various changes to the landscape of British night-life contributed to the emergence of a persistent culture of intoxication amongst young drinkers in which alcohol became an expected and age-appropriate behaviour, reflected in visible public displays of drunkenness among youth (Bailey, Griffin, & Shankar, 2015). The opportunities for consumption within UK cities are greater than a generation or so ago (Seaman & Ikegwuonu, 2010) and the spaces and products on offer to youth are tailored to encourage use (Measham, 2008). The current culture of students' drinking should be understood against these broader changes in consumption, as changes to the nightlife landscape and wider cultural norms in Britain have shaped the alcohol offered at universities today.

2.5.2 Life transitions

Consistently high youth drinking rates suggest that life-stage is also a factor which must be considered when developing suitable responses to alcohol consumption across UK universities (Brown, 2016). For most students the transition to university occurs between the ages of 18-25, a life-stage characterised as emerging adulthood. These years are typically a time of change and exploration in which individuals are neither an adolescent nor do they have the responsibilities and expectations that are normative to adulthood (Arnett, 2000). Emerging adulthood is a period in which alcohol consumption tends to rise and when excessive drinking is considered an expected and age-appropriate behaviour (Arnett, 2004). For the majority of young drinkers there is an established trajectory of drinking, with alcohol consumption increasing through adolescence into young adulthood. Generally, consumption begins to decrease as individuals take on more adult roles, such as employment, marriage and parenthood (Maggs & Schulenberg, 2005).

According to transitional theories (Van Gennep, 1960) university acts as an extension of the adolescence phase. Theorists argue that the position of students is ambiguous as they occupy a time between childhood and adulthood in which they experience the freedom to drink (most students are aged 18 and are therefore legally allowed to drink in the UK) and the independence of living away from parents whilst still being protected within the institutional environment (Arnett, 2004; Banister & Piacentini, 2008). Beccaria & Sande (2003) develop this theory further suggesting that during this liminal space, students begin the search for a new self and use alcohol to overcome separation from previous social structures and aid the development of new identities. In a UK based focus group study (N=27) conducted mostly on second year students, Banister & Picaentini (2008) found that during this period of instability, university students presume that they are 'given permission' to act in ways that would potentially be viewed as unacceptable outside the 'student world'. For these students there was a strong sense that they were fulfilling society's expectations of them as drinkers.

The concept of liminality is relevant to first year students in particular as they are experiencing this state of uncertainty for the first time. As young people move to university, they transition from the relatively controlled setting of further education and the family home, to an autonomous environment where they are expected to have greater independence and control over a range of social and health-related behaviours. There are arguably very few other life landmarks which cluster together in such a short space of time (Snow et al., 2003). While attending university is a normative and rewarding process for most, many first-year students can find this transition stressful due to factors such as separation, new social and academic demands and acquisition of independent living skills (Maggs & Schulenberg, 2005; LaBrie, Lamb & Pederson, 2009). As a result, many students who enter university do not complete their studies, with estimates of dropout rates for first year students at Liverpool John Moores university (LJMU) as high as 8.5% in 2017 (HESA, 2017). It is therefore likely that for first year undergraduates, alcohol plays an important role in exploring potential identities and aids the formation of new social networks and 'fitting in' with peer groups at what can be a challenging time (Banister & Piacentini, 2008).

Research published on American college students has shown that alcohol consumption increases during this transitional period (Baer, Kivlahan & Marlatt, 1995; Borsari, Murphy & Barnett, 2007; Hartzler & Fromme, 2003; LaBrie, Lamb & Pederson, 2009; Sher & Rutledge, 2007; White et al., 2006). To illustrate, one study including 520 US college students found a marked increase (t-tests; $p < 0.001$) in three indices of drinking for both males and females upon arriving at university. For example, in males, the number of days spent drinking during a typical week increased from 1.78 to 2.10, the number of standard drinks consumed per drinking day in a typical week increased from 3.75 to 4.03, and the total drinking quantity for a typical Friday and Saturday increased from 8.47 to 9.16 upon entering college (Hartzler & Fromme, 2003). On a similar note, increases in high-risk consumption styles (such as, preloading and drinking games) have been identified upon arrival to university in several US studies (Haas, Smith & Kagan, 2013; Zamboanga et al., 2010). In one study conducted on 708 first year students attending a university in California, the prevalence of preloading increased by nearly 20% from 61.9% to 79.9% upon entry into university, cases of preloading were also associated with increased intoxication (Haas, Smith & Kagan, 2013).

Much of the initial research associating increases in alcohol use with university entry emanates from the US and focuses on the activities of college students (Baer, Kivlahan & Marlatt, 1995; Borsari, Murphy & Barnett, 2007; Hartzler & Fromme, 2003; LaBrie, Lamb & Pederson, 2009; Sher & Rutledge, 2007; White et al., 2006). Whilst this work is of some interest, caution must be exercised when extrapolating these findings to British universities. Firstly, the drinking laws framework between the two countries differ substantially; in the UK the legal age for purchasing alcohol is 18 as opposed to 21 in most US states. Thus, students in the UK can freely drink within nightlife areas, whereas US college students are restricted to consuming alcohol at 'fraternity parties' or within their own accommodation (McAlaney & McMahon, 2007). Secondly, the two countries use different screening tools and measures to assess alcohol usage. The measure of a standard drink varies from nation to nation, for example 500ml of 4.5% beer is measured as 1.4 standard drinks in the US and 2.2 units within the UK, these differences compromise our ability to transfer and compare findings across the two nations (NHS, 2016; NIAA, 2018).

Beginning university is a major transition event in the lives of many young people which presents new experiences and pressures through wider exposure to people and behaviours (Brown, 2016). It may be that this transitional process is unique to the university setting and associated with a marked increase in excessive and risky drinking. To my knowledge there is no existing data in the UK which monitors students' consumption behaviours across the transition from home to university as well as the associated risk of negative health and behavioural outcomes. There is subsequently a need to explore students' experiences and the impacts of drinking across this potentially critical period of time to help inform the development of future alcohol interventions.

2.5.3 University as a facilitator of heavy drinking

Much of the student-based literature to date focuses on individual motivations for consumption such as, personal beliefs and drinking expectancies. However, drinking at university takes place in unique social environment which includes independent living, reduced parental control, increased social homogeneity and new drinking opportunities. It is likely that this setting is considerably different to what first year students experience before university. More recent recommendations suggest the need for a greater focus on the contexts and situational factors surrounding student alcohol behaviours, such as the contribution of the institutional setting in facilitating and reinforcing a heavy student drinking culture (Lorant et al., 2013).

Within the UK there is compelling evidence to suggest that alcohol consumption varies across universities. British universities vary in terms of their size, age, geographic region, whether the campus is on- or off- site, the student body and the courses studied; all of which combine to create a unique campus environment. Differences in consumption patterns have been identified across geographic regions (El Ansari, Sebena & Stock, 2013), with heavier drinking recorded on campuses in the North of England than in the Midlands and the South of England (Heather et al., 2011). These variations suggest that each university has different underlying local and institutional drinking norms. The institutions' setting and profile must therefore be considered when assessing students' drinking behaviours (Brown, 2016).

Despite differences across universities, one feature of the university environment which has consistently been associated with high alcohol consumption levels is student residency (Kypri et al., 2002; Lorant et al., 2013; Thombs et al., 2009; Ward & Gryczynski, 2009). In a study including 7,015 undergraduates enrolled at a university in Belgium, those students who resided in on-campus student halls were found to drink more frequently and engage more often in heavier drinking⁹ than those living off-campus (Odds Ratio [OR]=1.56). The study further found those with more roommates were at greater risk of frequent and heavy drinking, with each additional roommate increasing the risk of drinking by 6% (Lorant et al., 2013). Halls of residence create an open social environment in which students can mix with large and mixed gendered social groups. As adolescent studies show, young adults who have large social networks are more likely to engage in riskier drinking when compared to those who have fewer peers (Cullum et al., 2012; Ennet et al., 2006). Through dense social networks it is likely that shared residence environments facilitate contact with heavier drinkers and may therefore expose moderate consumers to more negative alcohol outcomes (Brown, 2016). Further, factors such as reduction in parental and institutional monitoring, new found independence and greater opportunities to socialise with peers could all be confounding factors which explain why several studies have found heightened levels of consumption in students residing in halls of residence (Holton, 2016); further research is needed to explore these aspects more clearly.

Higher drinking rates reported among students living on campus compared to those living off-campus indicate that drinking environments surrounding institutions may also act as a predictor for heavy drinking (Lorant et al., 2013). High spending on alcohol by university students ensure that most student dense areas are saturated by a variety of on and off-licence drinking outlets and that this subset of the population are consistently targeted by alcohol retailers and subjected to intensive alcohol advertising (Kypri et al., 2008; Ross-Houle & Quigg, 2019). Research has highlighted how cheap alcohol offers, intensive advertising and alcohol availability are correlated with increased incidences of binge drinking among student and youth populations (Kuo et al., 2003; Kypri et al., 2008; Trawley, Bhullar & Jones, 2017). For example, in a study conducted on 1,894 first year students across 119 US colleges, authors

⁹ Defined as consuming more than 6 drinks in one occasion.

found that high binge drinking rates across the study population were associated with proximity of on and off-licence alcohol retailers (Weitzman et al., 2003). Evidence indicates that heavy alcohol marketing landscapes play an influential role in maintaining the culture of heavy drinking and help to shape new students' understanding around what is normal and accepted at university (Hastings et al., 2005; Hastings & Angus, 2009).

Lastly, one university event which may contribute to the development of relaxed drinking norms at university is Freshers' period (also known as welcome week, Freshers' week and Orientation week). Freshers' period is a length of time (which varies depending on the university) in which first year students are welcomed to the institution through invitations to a variety of events that are often held in bars and nightclubs (Quigg, Hughes & Bellis, 2013). It is generally thought of as a time in which first year students acclimatise to their new environment and develop social networks with peers. However, Freshers' period also signifies a time of intensive alcohol promotions by local retailers, alcohol dominant social events and a relaxed culture of intoxication (Fuller et al., 2017; Riordan, Scarf & Conner, 2015). Results from a recent study in the UK investigating the marketing material given out to students during a Freshers' fair found that out of 85 handouts that included a drink promotion 94% were for alcoholic drinks (Fuller et al., 2017). Although much of the Freshers' period content involves, partying, socialising and drinking, many Student Unions (SU), including LJMU SU have incorporated innovative non-alcoholic events, such as laser quest, table tennis and film nights into their students Freshers' programme (NUS, 2017). In the 2016/2017 NUS Alcohol Impact report, 53% (N=13350) of undergraduates from across 21 institutions agreed that there were a sufficient number of social events at their university which did not centre around drinking alcohol (NUS, 2017).

While concerns over students' welfare during Freshers' period are widespread, to my knowledge no UK study has monitored first year students' patterns of consumption during this period. Although Freshers' period is seen by many as a singular event, it is possible that new students entering university gain exposure into what are accepted and normalised student behaviours which can influence future alcohol use (Riordan, Scarf & Conner, 2015). Understanding what drives and maintains students'

drinking across the transition to university may lead to more appropriate and possibly targeted public health interventions which aim to tackle high risk drinking in the early stages of development and minimise university dropout rates.

2.5.4 Normative beliefs of a heavy student drinking culture

In recent years, much of the research into students' drinking has been underpinned by the social norms theory. Social norms are an individual's beliefs about normative attitudes and behaviours of a specific group and an individual's motivation to comply with these perceptions (Perkins & Berkowitz, 1986). Based upon early social psychology (Festinger, 1954), social norms theory proposes that individuals commonly misperceive the drinking levels of others, believing them to be higher than they are and subsequently alter their own drinking behaviour to match what they perceive to be normal (Baer, Stacy & Larimer, 1991; Stock et al., 2014; McAlaney & McMahon, 2007; Perkins, 2002; Kypri & Langley, 2003). Historically, social norms have been assessed through discrete quantitative tools which explore students' beliefs relating to frequency and levels of peer drinking (i.e., descriptive norms) or peers' attitudes towards drinking (i.e. injunctive norms) (John & Alwyn, 2010; 2014). From a health promotion perspective, social norms are of particular relevance when tackling heavy drinking among student populations as they are shown to be the strongest independent predictor of both binge drinking intention and binge drinking itself among students (Baer, Stacy & Larimer, 1991; Borsari & Carey, 2001; French & Cooke, 2012; Neighbours et al., 2007). For example, one large study (N = 76,245) conducted in the US revealed that overestimations of drinking among university peers emerged as a stronger predictor of drinking behaviour than demographic factors and actual campus norms (Perkins, Haine & Rice, 2005). Such findings have now been replicated within UK university settings (Bewick et al., 2008b; McAlaney & McMahon, 2007). In a large Scottish university (N=500), significant associations were documented between an individual's personal alcohol use, including frequency of drinking ($p < .001$), drunkenness ($p < .001$) and the number of drinks consumed on a night out ($p < .001$) and individuals' perceptions about alcohol consumption in those around them (McAlaney & McMahon, 2007).

There is general acceptance within the UK that drinking is an important aspect of student life and a behaviour which is expected from those who choose to go to university (Carpenter et al., 2008;

Piacentini & Banister, 2006). For example, in a study carried out on 13,451 undergraduates enrolled across 21 UK universities, 85% of students agreed that drinking to get drunk was part of the student culture (NUS, 2017). The media focus on students' binge drinking behaviour, which includes images of students' public displays of drunkenness are accessible to younger audiences. It is possible that through media depictions and vicarious experiences new students arrive at university with pre-determined perceptions into what are accepted and normalised student behaviours. Peers also play a vital role in creating and reaffirming drinking norms at university as they provide students with role models and validations of behaviour. According to the social learning theory, students learn common drinking rituals and consumption behaviours from peers through observational learning, imitation, and modelling (Bandura, 1977, 1986). These observed alcohol behaviours then serve as a benchmark by which individuals gauge their own alcohol use (Perkins, 2002). Once peer groups are established, if heavy alcohol use is believed to be the accepted norm and shared by the group then this can strengthen the feeling of belonging and affinity of fellow members. Those who internalise the belief that drinking plays a prominent role at university are at greatest risk of developing alcohol problems and show greater resistance to information which challenges these perceptions (Livingstone, Young & Manstead, 2011; Osberg et al., 2010).

It has been theorised that social norms interventions which steer students towards the perception that alcohol is consumed moderately among peers and educates people about actual drinking norms will lead to reduced drinking (Perkins, 2002). The application of such approaches has led to short term decreases in alcohol use, however there is little evidence of sustained changes to drinking behaviour (Bewick et al., 2008b; Kypri et al., 2013; Kypri et al., 2014). Foxcroft et al (2015) argues that these individualised approaches do not consider the contextual and social processes underpinning consumption. Whilst there is much published quantitative research into students' perceptions of drinking, current literature is limited by the consistent use of discrete quantitative tools to measure complex social and cultural perceptions. A broader and more holistic qualitative approach is therefore warranted to understand the development and underlying perceptions and expectations of drinking

within the university context. Greater understanding of students drinking beliefs could arguably create opportunities to challenge, re-frame and modify perceptions at a crucial developmental time-point.

2.5.5 Motivations of drinking at university

According to motivational models of alcohol use, there are two distinct sets of motivations which drive alcohol consumption in young adults (Cox & Klinger, 1988; Lyvers et al., 2010). Firstly, alcohol facilitates enjoyment and has been described as integral in the process of social bonding (Seaman & Ikegwuonu, 2010). Secondly, alcohol can be used as a tool to overcome personal problems, such as dealing with stress, coping and boredom (Piacentini & Banister, 2006). To achieve a greater understanding of the reasons for alcohol use among students both sets of motivations will be explored in this next section.

Whilst there is a strong body of evidence relating to problems arising from heavy drinking behaviour, the social significance of excessive drinking is relatively overlooked within the UK research field. Drinking holds important social dimensions for young adults in that alcohol can enhance social interaction and create a sense of belonging among fellow group members (Griffin et al., 2009; Newbury-Birch et al., 2009; Piacentini & Banister, 2006; Seaman & Ikegwuonu, 2010). In a UK study exploring young adults' group drinking behaviours (35 interviews), alcohol was highly valued among peer groups for its ability to act as a social lubricant through creating shared stories and experiences and maintaining group bonds (Seaman & Ikegwuonu, 2010). There is also some evidence which highlights links between alcohol consumption and having both a greater number and a higher quality of friendships (Ali & Dwyer, 2010; Fujimoto & Valente, 2012).

Drawing from concepts of Bourdieu's theory of habitus, field and capital (1984; 1986), young people often associate social and cultural capital with drinking (Atkinson et al., 2015; Scott et al., 2017). Social capital refers to the importance that young people place on social networks. For students transitioning to university the formation of new social networks is likely to be a priority as dislocation of former social ties mean individuals look for new relationships for support and guidance (Brown, 2016; Wei, Russell & Zakalik, 2005; Fisher & Hood, 1987). The initial weeks of university are seen to be key to

establishing social capital. In order for new students to successfully adapt to university life they must 'fit in' to a social group (Scott et al., 2017). To achieve acceptance, individuals internalise and act out cultural and social norms which are related to the field, in this case heavy drinking norms linked to the mainstream student culture. Bourdieu contends that in conforming to these norms, individuals feel that they will gain high levels of social capital and peer recognition (Baer, Stacy & Larimer, 1991; Garnett et al., 2015; McAlaney & McMahon, 2007; Perkins & Berkowitz, 1986; Perkins, 2002; Weitzman et al., 2003). In one small UK study, the social functions of alcohol such as enhancing group bonding and easing social interaction, was found to ease the transition to university life and enhance the sense of belonging among new first year students (Brown, 2016). Bourdieu's theory of capital can help to conceptualise the interaction between an individual's choice to drink and the social construction of drinking practices to help understand drinking behaviours within this unique context (Ross- Houle & Quigg, 2019).

Drinking to cope is an employed strategy used by individuals to overcome situations which are deemed as stressful. Of the different motives underlying young adults' alcohol use, coping with stress and anxiety have been closely linked to alcohol-related problems (Cox et al., 2006; Kuntsche et al., 2005). This is illustrated in a 2006 study conducted on 402 young UK adults (including both secondary and university students) which found negative reasons for consumption, such as coping, significantly predicted alcohol-related problems ($p < .0001$) (Cox et al., 2006). Although many view the transition to university as an inherently positive experience, this pivotal transitional phase is fraught with numerous challenges and demands which can lead to maladjustment. US studies report that the first year of university is when most psychological problems, such as depression, isolation and anxiety emerge and is when students report higher levels of distress (Fisher & Hood, 1987; Wei, Russell & Zakalik, 2005). In past research those individuals who have found the transition to university stressful have utilised alcohol as a means of coping (Brown, 2016; Rutledge & Sher, 2001); this maladaptive effort could lead to high risk drinking or even the beginnings of future alcohol addiction.

2.6 Universities response to students' heavy drinking

The UK Government alcohol strategy for England and Wales (HM Government, 2012) highlights university as a significant period in time for high risk drinking. The government posit that universities have a duty of care to their students to encourage more moderate drinking on their campuses (Brown, 2016). Across universities, support and well-being services have been set up to guide students through difficult times at university and offer support around mental health and substance use. However, there is limited evaluation of these services and evidence that is available suggests that less than 10% of students experiencing issues seek help through these support channels (Walsh et al., 2009 (N=248 undergraduates from a UK university)).

Alongside the wider support services offered to students, some universities use awareness techniques to educate students of the consequences around drinking as a means of reducing risk. These interventions are often carried out in conjunction with national student bodies (NUS) and include displaying alcohol-related harm material around campus (such as posters and social media messaging) and increasing the number of non-alcohol events during Freshers' (NUS, 2015). Evaluations of these campaigns indicates small changes to students' perceptions around the acceptance of drinking on campus, however these evaluations are not robust enough to measure the impact that messaging has on students' consumption levels (NUS, 2015). For example, the delivery of alcohol awareness messaging on campus is often unregulated therefore it is difficult to measure the impact that these interventions have on students' alcohol behaviours.

Behavioural change approaches are the most common interventions utilised among student populations. Historically, these approaches have been underpinned by two theoretical approaches, social norms and motivational enhances. The social norms approach (see section 2.5.4) steers students towards the perception that alcohol is consumed moderately among peers and educates people about actual drinking norms will lead to reduced drinking (Perkins, 2002). The application of such approaches has led to short term decreases in alcohol use, however there is little evidence of sustained changes to drinking behaviour (Bewick et al., 2008b; Kypri et al., 2013; Kypri et al., 2014). Analysis of 70 social norms

approaches conducted on either university or college students found that post-intervention, many students returned to previous habits and that most studies provided low to moderate quality evidence of behavioural change (Foxcroft et al., 2015). Motivational enhancement approaches have provided another framework for student drinking interventions. This approach motivates individuals to commit to change their behaviours through using psychological models. Some interventions have led to reduced binge drinking rates but similar to social norm approaches there is a lack of evidence around sustained behavioural changes (Carey et al., 2007).

Limited evidence of effective university-based interventions suggests the need for a wider approach to students drinking which includes the involvement of national and local influencers and university staff, the Student Union and support services to ensure consistency.

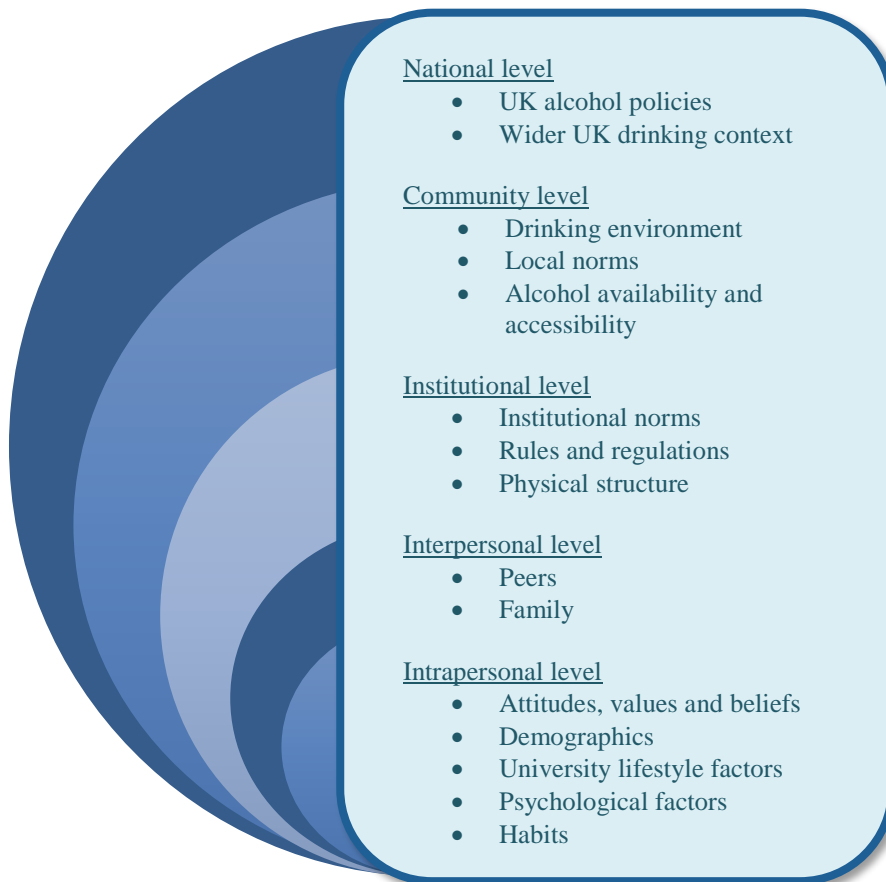
2.7 Conceptual framework

It is argued that current individual-oriented behaviour strategies fail to take into consideration the complex interactions between individual determinants and the social, local and national environment (Foxcroft et al., 2015). Research suggests that the interplay between individual determinants and the influencing factors of the university and local setting have contributed to the development and maintenance of a culture of normalised drinking across universities (Fegley, 2013). Educating individuals to make healthy changes to their behaviour when the wider context is not supportive is likely to be ineffective and ultimately only lead to short-term health changes (Sallis, Owen & Fisher, 2008). Therefore, it is anticipated that through adopting a multi-level framework to explore the research issue, greater understanding of the complex nature of students' drinking will be gathered which will help to guide development of future alcohol interventions by identifying new insights for policy makers and developers across multiple levels.

One such model that encapsulates multi-level determinants is the Socio-Ecological Model (SEM), which was originally developed by Bronfenbrenner in 1979 as a theoretical model of human development (Bronfenbrenner, 1979). The framework recognises behaviour as multifaceted and moves beyond the focus of individual-level determinants by taking into account the influence of the environment. The application of the SEM has been used successfully in past studies to explore the complexities of

students' drinking at university (Brown, 2016). Smith (2017) utilised a variation of the model to explore drinking among US student athletes and identified significant factors associated with drinking across all levels of the model (community, organisational, relationship and individual). An outline of the socio-ecological factors considered in this programme of research is presented in figure 2.

Figure 2: The Socio-ecological model applied to university student drinking



The conceptual framework was utilised within the programme of research to help guide the review of literature and develop the research questions, sampling strategy and research design. One of the main strengths of the SEM is that it provides a comprehensive framework for integrating multiple theories (Sallis, Owen & Fisher, 2008). This explanatory approach was presumed to be most applicable due to the limited research around alcohol use and university transition. The model is however weakened by fact that it does not establish how factors at each level influence behaviour (Sallis, Owen & Fisher, 2008). Other conceptual models were considered, such as the theory of planned behaviour which is underpinned by the concept that behaviour is guided equally by personal attitudes towards behaviour, subjective norms and perceived behavioural control (Ajzen, 1991). I decided that this model was less fit for purpose as in the face of widespread alcohol availability and intensive alcohol marketing the theory of planned behaviour model does not encapsulate the level of environmental input on drinking behaviour. Through adopting a comprehensive framework such as the SEM principles of the theory of planned behaviour are likely to be considered.

How this framework fits within this research programme will now be considered:

National level factors include local and national policies which govern access to alcohol, such as the legal age of the sale of alcohol, alcohol licensing and pricing policy. National influences also incorporate the wider context of UK drinking (Brown, 2016). In order to understand the wider UK alcohol context, I spent considerable time reviewing literature on youth drinking trends and the current landscape of British nightlife environments. It is important that the culture of students' drinking is understood against the wider alcohol context as this has ultimately shaped the alcohol on offer at universities today. The impact that national level factors have on students' drinking behaviour will be summarised in the integration chapter (Chapter 7) of this research programme.

Community level factors include local drinking spaces and the availability and promotional activity of alcohol aimed at students within the local area. Little is known about how alcohol is promoted and portrayed to students by local drinking venues and club promoters, particularly during the initial weeks of university. In order to gather multiple perspectives of the local alcohol landscape, paired interviews

were adopted to explore first year students' experiences of alcohol marketing in the initial weeks of university (Study III, Chapter 6).

Institutional level factors include the physical structure of university as well as the rules and regulations developed by the university in relation to student alcohol use. Much of the student-based literature to date focuses on individual motivations for consumption. However, alcohol consumption among university students takes place in a unique environment which includes independent living, reduced parental and institutional authority, open living environments and a wide availability of social activities. Through adopting a mixed method approach a greater understanding into local students' current drinking behaviours and the impacts that organisational function and situational factors have on student consumption is anticipated.

Interpersonal level factors refer to first year students' social relationships with new and unfamiliar peers. These relationships can be positive as they provide support and integration to new students transitioning to university, however they also have the potential to expose students to negative behaviours such as heavy drinking (Brown, 2016). Understanding how alcohol is used by students to form and secure new relationships can enhance identification of public health initiatives and recognise potential barriers of interventions aimed at behaviour change. In order to explore the importance of drinking on social dynamics, a mixed method design study was warranted. It was firstly important to explore the prevalence of students' social drinking experiences through quantitative measures. Qualitative methods were then adopted to gain insight into the context of these social drinking experiences.

Intrapersonal level factors relate to first year students' anxieties associated with starting university and any observed changes in behaviour correlated with this life event (Brown, 2016). Given limited knowledge on students' drinking behaviour across the transition from home to university I decided to adopt a quantitative research design to measure pre and post arrival alcohol patterns and the impacts of alcohol use across this transitional process. Intrapersonal influences also include normative perceptions of alcohol use; perceptions held around normal and expected drinking behaviour at university are important when considering how to frame health information and guidance about alcohol. Whilst there

is much published quantitative research into students' perceptions of drinking, current literature is limited by the consistent use of discrete quantitative tools to measure complex social and cultural perceptions. A broader and more holistic qualitative approach is therefore warranted to understand the development and underlying perceptions and expectations of drinking within the university context. In order to gather multiple perspectives, focus groups and paired interviews were adopted to explore students' beliefs and experiences of the university drinking culture.

2.8 Chapter Summary

This chapter discussed the ongoing problem of students' drinking as well as wider relevant areas of research including, the prevalence of drinking within the UK, alcohol-related harm, factors associated with students' drinking and the conceptual framework which underpins this thesis. Beginning university is a major transition event in the lives of many young people which presents new experiences and pressures through wider exposure to people and behaviours (Brown, 2016). During this transition several tasks must be navigated which include separation, social network demands, acquisition of independent living and question of identity formation. It may be that this transitional process is unique to the university setting and associated with a marked increase in excessive and risky drinking. To my knowledge there is no existing data in the UK which monitors students' drinking experiences across the transition from home to university as well as the associated risk of negative health and behavioural outcomes. With this in mind, this research programme aims to explore the perceptions, prevalence and factors associated with alcohol use as well as related harms during the move from home to university to help inform the development of future alcohol intervention.

CHAPTER 3: METHODOLOGICAL OVERVIEW

3.1 INTRODUCTION

The empirical studies presented in this thesis set out to understand the perceptions, prevalence and factors associated with alcohol use as well as related harms across the transition from home to university. Given the exploratory nature and diversity of research questions that this thesis aimed to explore, a combination of both quantitative and qualitative research approaches were used to systematically answer the research aims. This chapter provides an overview of the aims, mixed method approaches, and design typologies used. The justification and limitations associated with each of the quantitative and qualitative methods are covered later in the chapter, whilst the sampling and data collection methods are discussed in detail in each respective chapter.

3.2 AIM AND RESEARCH QUESTIONS

The research presented in this thesis aimed to explore the perceptions, prevalence and factors associated with alcohol use as well as related harms during the move from home to university (see Chapter 1 for PhD overview). Due to the explanatory nature of the research programme the research questions were kept broad, thus enabling unforeseen themes to be explored.

The following research questions informed the process of this research:

1. What are students' pre-existing perceptions of the university student drinking culture and the role that alcohol plays during the transition into university?
2. What are the drinking behaviours of students' transitioning to university?
3. Are students' drinking behaviours before and during the transition to university related to health and social wellbeing?
4. What factors are associated with the trajectory of students' drinking across the transition from home to university?

3.3 MIXED METHODS RESEARCH AND PRAGMATISM AS A RESEARCH PARADIGM

A mixed methods approach was considered to be the most appropriate method to answer the research questions. The term mixed methods refers to the integration of both qualitative and quantitative research approaches to investigate a topic within a single study (Burke-Johnson & Onwuegbuzie, 2004). Over the past two decades mixed method research has established itself as a ‘third methodological movement’ and has been widely advocated within the field of health research (Tashakkori & Teddlie, 2003; 2010). The premise of mixed methods research is that in utilising both qualitative and quantitative research approaches a better understanding of the research problem is achieved (Creswell & Plano Clark, 2011). The separate use of methods arguably captures only one angle of the research issue, for example quantitative methods often lack understanding and meaning, on the other hand qualitative research lacks objectivity and reliability. Mixing approaches therefore draws from the strengths and minimises the respective weaknesses of both approaches (Burke- Johnson & Onwuegbuzie, 2004).

The extent to which different research approaches, each with their own epistemological position, can be integrated within the same research programme has stimulated debate over the years (Bryman, 1984; Burke- Johnson & Onwuegbuzie, 2004; Creswell & Plano Clark, 2011). Broadly speaking, quantitative methods are rooted in a positivism perspective which believes that there is one single objective reality that is quantifiable and independent of social construction. In contrast, qualitative methods stem from constructivism, which views research as a way to yield rich and multifaceted knowledge of worlds where reality is socially constructed by the persons who experience it (Bloomberg & Volpe, 2016; Dures et al., 2011; Yardley & Bishop, 2015). Critics of the mixed methods research approach argue that due to the fundamentally different ontological and epistemological assumptions of these two approaches they are incompatible.

Therefore, the research presented in this thesis does not side with an ontological position such as positivism or constructivism but rather this research fits within a pragmatic approach. Pragmatism is most commonly associated with mixed methods research and involves solving practical issues of the real world by using a pluralistic approach to derive knowledge (Feilzer, 2010). Pragmatism is not

committed to a single paradigm rather research is conducted according to the methods deemed most appropriate by the researcher (Bloomberg & Volpe, 2016; Creswell, 2011; Denscombe, 2008). Pragmatism regards qualitative and quantitative methods as distinct but also commensurate, as both act as a means of producing knowledge. Through adopting both qualitative and quantitative methods, links between the phenomena under investigation and the importance of the physical world as well as the influence of human experience can be explored systematically (Burke-Johnson & Onquegbuzie, 2004). In the spirit of pragmatism, the current research is framed within the Social-ecological Model and focuses on the research problem rather than alignment with a research paradigm (Yardley & Bishop, 2015).

One example of how taking a pragmatic approach influenced the research is the focus group method adopted in Study I (see section 3.7 for further rationale). Focus groups were considered ideal for gaining insight into prospective students' perceived norms of drinking at university since they aim to explore a multiplicity of view as well as collective meanings and shared knowledge. Therefore, focus groups are valuable when conducting exploratory research on under-researched topics as the unstructured nature of focus groups yield discussion on important yet unexpected themes.

3.3 THE RATIONALE FOR USING A MIXED METHODS RESEARCH DESIGN

The decision to adopt a mixed method research approach to explore the issue of students' drinking was three-fold. First, excessive alcohol use at university is a complex research problem and therefore required methodological flexibility to fully understand the nature of the problem. I felt that restricting the research to a single paradigm would not be conducive to the broad aims and questions that this research aimed to answer.

Second, after reviewing the literature (Chapter 2) there appears to be a dearth of research available on students' drinking experiences as they transition from home to university. Past US research has addressed the issue quantitatively but to my knowledge this research has not been triangulated with qualitative data (Baer, Kivlahan & Marlatt, 1995; LaBrie, Lamb & Pederson, 2009; Sher & Rutledge,

2007; White et al., 2006). There is a need for studies which effectively combine both quantitative methods to measure the magnitude of the problem with qualitative approaches to add insight and meaning. Therefore, the contribution of both quantitative and qualitative components in this thesis was to a). measure the prevalence of students' perceptions and the extent and impact of alcohol use upon entry to university and b). to generate a deep, contextualized understanding of the research problem. Through combining both approaches it was presumed that a substantive exploration into students' alcohol use during the transition into university would be obtained and the biases that are common in mono-method research would be alleviated (Bergman, 2011). Lastly, as this research is an applied piece of work, adopting a mixed method research design to explore the issue of students' drinking is expected to offer more utility to public health professionals and local institutions interested in reducing alcohol use and minimising harm (Denzin, 2010).

Mixing methods is however not without its limitations. Firstly, implementing two phases of research through different methodologies can be a complex and lengthy process which requires expertise (Creswell, 2003). There are multiple options for how and when to integrate qualitative and quantitative components of mixed methods research which means that researchers can be ill-equipped when deciding which design typologies to use. Further, it can be difficult to create a coherent picture within the final integration stage of the research as discrepancies that arise across the difference approaches can be difficult to explain. Also, when convergent findings from across the strands of research are found there must be caution in interpretation since it may be that each of the data is flawed rather than there are true similarities (Heale & Forbes, 2013).

3.4 DESIGN PRINCIPLES

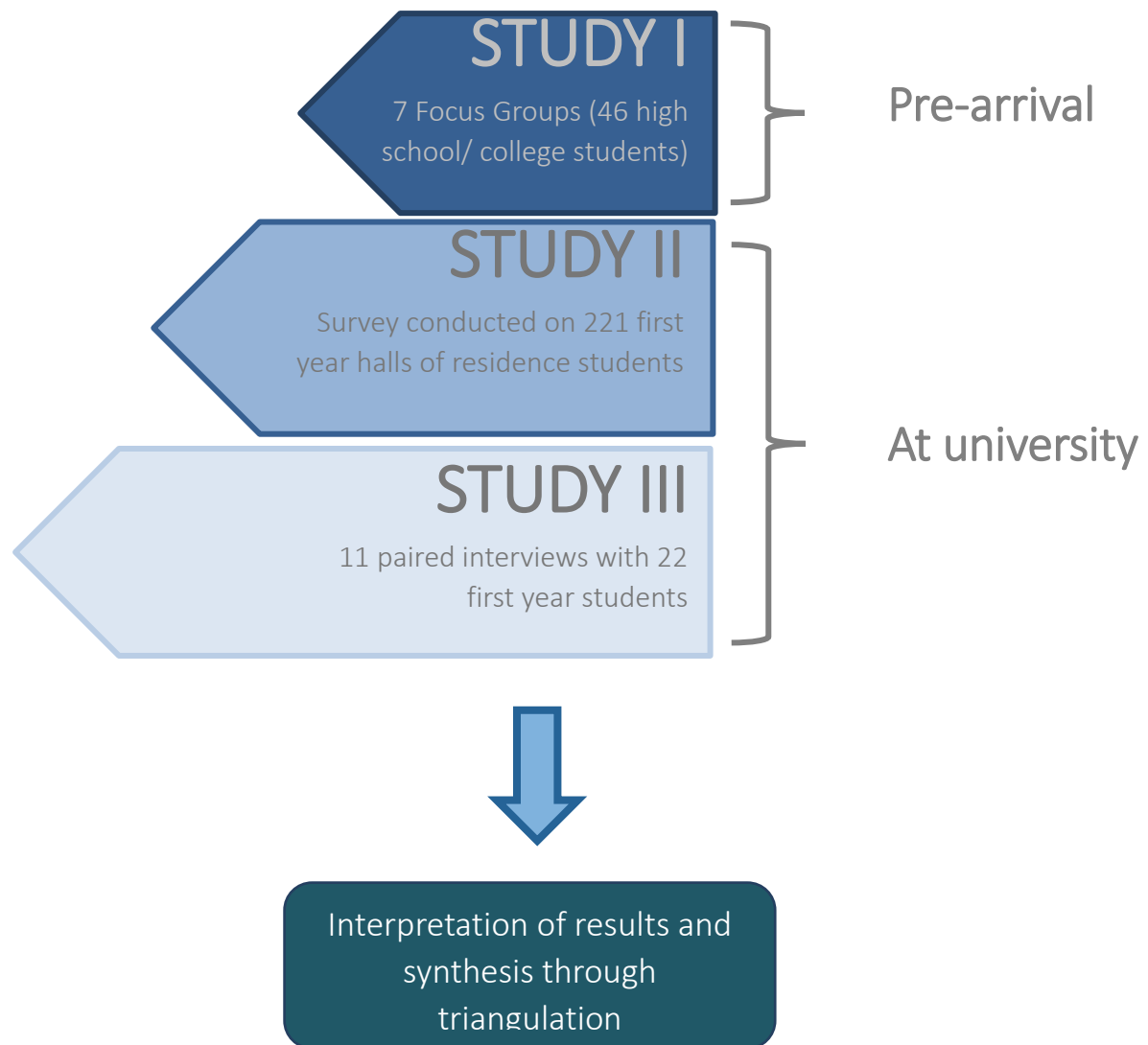
There is a wide range of research design typologies that methodologists have developed over the years (Creswell & Plano Clark, 2011; Tashakkori & Teddlie, 1998) which help frame and develop the mixing of methods. However, recently we have seen a move away from complex design typologies to a simplified framework that does not restrict research to a single design. Leech & Onwuegbuzie (2009) argue that many of the research typologies published are unnecessarily complex and create challenges

when selecting the optimal research design. After conducting a content analysis on a variety of typologies, they suggest that the emphasis of the research design should be the function of the following three dimensions: the level of mixing and the stage that it occurs, time orientation (concurrent versus sequential), and the emphasis of approaches (equal status versus dominant status).

For this research, an exploratory sequential design was undertaken. The primary features of this approach are that data for each phase of the study are collected in a discrete process. Both qualitative and quantitative strands are then mixed in the final integrated chapter of the thesis (Creswell & Plano Clark, 2011). The quantitative stage (Study II) was conducted first and helped to inform both qualitative research components (Study I and III). Having identified the transition to university as a high-risk period for problem drinking associated with an increased risk of negative health and wellbeing outcomes and alcohol-related harms, it was necessary to complete the research by conducting qualitative research to add further discovery and explanation. Data was then integrated in the discussion chapter which involved merging themes from both the quantitative (Study II) and qualitative findings (Studies I and III) simultaneously on a theme-by-theme basis (Farmer et al., 2006). Both qualitative and quantitative components were valued equally throughout the research.

The research studies within this thesis are presented in a chronological order, therefore the focus group study (Study I) which explores prospective university students' pre-conceived perceptions and expectations of the student drinking culture is presented first. This phase of the research is then followed by the cross-sectional survey (Study II) and the paired interview study (Study III) carried out on first-year students to explore post-arrival drinking behaviours, alcohol related harms and factors associated with the trajectory of drinking. Through adopting a time-line approach it is anticipated that the findings from the research will identify in detail the transitional process undergone by students and highlight the areas for early and targeted intervention.

Figure 3: Implementation of the exploratory sequential design



3.5 THE RESEARCH SITE

Liverpool is home to three universities: Liverpool John Moores University, The University of Liverpool and Liverpool Hope University and has a large student population, with approximately 70,000 students enrolled across the three universities (HESA, 2017).

Within my programme of research two discreet samples are explored. Firstly, perceptions around drinking at university are explored among college and high school students who have the intention of attending university and are located in the Merseyside area (Study I). In contrast, Study II and III reports the drinking behaviours of first year LJMU university students only. The rationale for exploring LJMU students' drinking habits as opposed to a wider sample of students from across Liverpool was twofold. Firstly, as LJMU were part of the AIS, I had been working closely with a variety of stakeholders from across the university (the Student Union, student services, halls of residence staff and university officials). It was therefore anticipated that the findings from this line of research will be utilised locally, by LJMU staff to help inform and develop targeted alcohol strategies, which can be applied to students' drinking at LJMU (Chapter 7 for intervention points).

Further, variations in students' alcohol use by geographic region have been identified in UK research (see Chapter 2). University campuses located in the North of England have been found to display higher student drinking rates than any other region (Heather et al., 2011). These disparities suggest that drinking contexts vary across universities and locations, therefore comprehensive research from a single campus study may prove more effective for policy implementation in the local area.

3.6 STUDY DEVELOPMENT

A key feature of mixed methods research is its reflexive and responsive nature to unexpected events and pitfalls which present themselves across the research process (Crump & Logan, 2008). This allows the researcher time and flexibility to react to unexpected results and make changes to the methods used. In the early stages of the research development, I decided that due to the scarcity of existing literature available on local students' drinking, a secondary data analysis would be conducted to help develop understanding and identify key areas for further exploration in the subsequent research studies. At the time of development, LJMU was one of seven universities participating in the Alcohol Impact Scheme

(AIS). The AIS was developed and implemented by the Home Office and National Union of Students (NUS, 2014) with the aim of creating a positive culture of responsible drinking at university through behavioural change. To monitor drinking behaviour following the AIS pilot, a student survey was developed and implemented at three different time points during the course of the year across the seven participating universities. The survey was designed by researchers at the NUS and comprised 50 questions, some of which were based on previously validated instruments. For the purpose of the present research programme, I obtained permission from the NUS to access the cross-sectional data from the LJMU baseline survey. I then cleaned, recoded and conducted bivariate analysis on the baseline data. The primary aim of this research phase was to understand current drinking behaviours of university students from LJMU only and explore any associations that these behaviours have with health and wellbeing.

After conducting systematic analysis on the dataset, I decided that due to several limitations associated with the data collection process and the limited size and heterogeneity of the study population, no further analysis would be carried out. The sample consisted of 197 (135 women and 60 men aged 18-30 years) students from across all university years, which meant that only 0.95% of the eligible sample provided a response to the survey (20,635 students enrolled at LJMU in 2014/2015 (HESA, 2015)). The second major flaw lies with the timing of survey dissemination, which began in May and concluded in June 2014, as this fell within LJMU's examination period. Consequently, I felt that the data did not accurately represent students' typical student drinking trends in Liverpool and therefore the findings did not answer the studies' research aims and questions. Consequently, for the purpose of this research programme the supervisory team and I made the decision not to include the study within the overall programme.

Although unlikely to be truly representative, the initial phase of the NUS analysis did provide evidence of significant engagement in risky drinking styles across the study population, such as preloading (87% of students who drink preloaded) and drinking games (48% of students who drink participated in drinking games). Engagement in these drinking practices was associated with negative health and wellbeing outcomes, such as injury and sexual risk. This information was used to inform the

development of the both the quantitative and qualitative research strands in my research. Both approaches investigate specific drinking behaviours across the transition from home to university.

3.7 STUDY-SPECIFIC METHODOLOGICAL DETAILS

In order to address the research questions, particular methodological approaches were chosen. This section contains a brief description of the series of studies included in the mixed method research design and addresses the rationale and some of the limitations associated with each approach. Specific methods and procedures are explored in more detail within each of the respective chapters.

This programme of research commenced in 2015 and data collection was concluded in November 2016. The three studies included in this mixed methods research design and the specific methods used are outlined in Table 1.

Table 1. Overview of the research programme

Study	Study design	Time of data collection	Recruitment	Participants	Data collection	Data analysis
I	Qualitative focus group study	May-Oct 2016	Online research invitations to schools and colleges in the Merseyside area	Prospective university students aged 16-20 years	7 Focus group interviews (N=46)	Thematic analysis
II	Cross-sectional survey study	Nov-Dec 2015	Student researchers recruited first year halls of residence students	First year LJMU undergraduates	Questionnaires of prior to and at university alcohol use (N=221)	Univariable and multivariable analysis
III	Qualitative paired interview study	Sep-Nov 2016	Social media, lecture halls, university halls of residence, online research invitations	First year LJMU undergraduates	Semi-structured paired interviews (N=22)	Thematic analysis

3.7.1 Quantitative study method: Study II- Cross sectional survey

The main objective of quantitative research is to provide data which is representative of the study population (Neale, 2008). In reviewing the literature, it was apparent that surveys are the dominant research approach for measuring undergraduates drinking experiences and perceptions in the UK. Survey research has provided statistical knowledge on frequency and intensity of alcohol consumption amongst undergraduate populations (Bewick et al., 2008a; Penny & Armstrong-Hallam, 2010) and are often used for their ease of administration, proven reliability and validity, and their cost effectiveness (Bryman, 2008). The use of quantitative measures in public health research is historically favoured by policy makers (Markula & Silk, 2011) however, the structured format limits personal expression and exploration into why behaviours occur.

Study II was a cross-sectional survey, designed to explore students' drinking behaviour, perceptions of drinking and health and well-being outcomes associated with alcohol use during the transition from home to university. As there is limited research which monitors changes in students' drinking behavior upon entry to university, it was decided that an exploratory survey approach was an appropriate measure to explore the research problem. The exploratory nature of this quantitative phase identified key areas that required further in-depth exploration with qualitative means.

Study 2 was granted ethical approval by LJMU ethics committee (15/EHC/058). Student hall representatives disseminated a questionnaire to a cross section of first year LJMU undergraduates residing in university halls of residence. Data collection took place a month after students had entered university, over a four-week period. Pen-pencil questionnaires were chosen as the method for this study as it was in fitting with the recruitment strategy (see Chapter 5 for method rationale). The participants for this study were first year halls of residence university students and were aged 18-25 years old (N=221). Descriptive analyses were used to assess perceptions and experiences with alcohol at university. Univariable analyses were conducted to identify changes in perceptions and drinking behaviour upon entering university. Backward Conditional Logistic regression analysis were carried out to identify which characteristics were independently associated with health and wellbeing and

alcohol-related harms during the transition to university. All data was anonymised and stored on a password protected computer which only I had access to.

3.7.1.2 Validity and reliability

It is important to consider issues of reliability and validity in quantitative research. Validity describes the extent to which a measure accurately represents the concept it is meant to measure (Bryman, 2008). Reliability on the other hand relates to whether there is consistency across the measures. In order to establish validity and reliability within Study II, several procedures were followed (Bolarinwa, 2015). The instrument used was developed through a combination of existing measures (Drinking Norms Rating Form (Baer, Stacy & Larimer, 1991); College life alcohol salience scale [CLASS] (Osberg et al., 2010)) as well as bespoke items created for the purpose of the research. Members of the supervisory team, who have expertise in conducting alcohol and survey research, reviewed the questionnaire to ensure the items measured the traits of interest. The survey was then piloted amongst fellow students at LJMU to highlight pitfalls in the questions being asked and identify instruments which may be inappropriate or incomprehensible (Van Teijlingen & Hundley, 2002) (see Chapter 5 for further details).

As the research relied on self-report data it is possible that students may have responded in a way that they thought fit for the research purpose or in a way believed to be socially acceptable. Social desirability is a common issue in survey designs, especially when answering socially sensitive questions, such as alcohol consumption (Morleo, Cook & Bellis, 2011). It is likely therefore, that the study suffers from biases related to social desirability. Such biases can lead to underestimation of alcohol use across populations; young males in particular have been found to underestimate their drinking significantly more when compared to other demographic groups (Livingston & Callinan, 2015). I carried out several measures in an attempt to reduce respondent bias. Completion of surveys was carried out by participants in confidence and at a time that was convenient to them. Hall representatives also made every effort to encourage participants to be honest about their usual and past drinking behaviour. In addition, as the direct sampling approach relied on social network bonds for compliance it is likely that respondents disclosed more accurate information than they would have with the academic researcher (Burns & Schubotz, 2009).

3.7.2 Qualitative research phases

The second phase of the mixed-method design was based on the aim of qualitative research which is to make sense and gain a deeper understanding of the phenomena and the sociocultural world (Denzin & Lincoln, 2005). It is argued that as drinking is primarily a social act it is essential to investigate the social context of alcohol consumption and its related behaviours (Lonczak et al., 2007). Qualitative research methods therefore present an appropriate methodology to explore the environmental, social, and cultural context of drinking at university due to their ability to capture context-embedded experiences (Gilbert, 1990). Further, the initial review of literature revealed that relatively few studies have explored students' perceptions and experiences of drinking during the transition to university through qualitative means. Given the limited knowledge on the phenomena of drinking during university transition a qualitative approach utilising both focus groups and paired interviews was warranted.

3.7.2.1 Study I: Focus group study with prospective students

Study I utilised focus groups to explore prospective university students' perceptions of the student drinking culture and role that alcohol plays at university. Data were collected during May to October 2016. Seven focus groups were conducted with high school and college students aged 16-21 years (N=46). Invitations to take part in the study were sent to 78 schools and colleges within the Merseyside area of which three responded and consented to take part. I liaised with the school/ college to organise a convenient time and date. Focus groups were conducted in quiet private spaces at the institution and lasted on average 60 minutes each, consent to participate was obtained from each participant prior to the discussion. Each of the interviews was recorded using two Dictaphones.

There were several reasons for choosing focus groups as the design of choice. Focus group interviews feature as 'carefully planned discussions designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment' (Krueger, 1994: 6). Focus groups are based on group interaction which permits participants to respond and build upon the reactions of others and thus are an appropriate method when the aim of the research is to elicit a multiplicity of views (Liamputtong, 2011). As perceptions are not constructed in isolation but through experiences and interactions, focus groups

can be considered ideal for gaining insight into perceived norms of drinking at university since they generate collective meanings and shared knowledge (Grønkjær et al., 2011). This technique has been used successfully in previous work exploring perceptions of undergraduate students (Hallett et al., 2012; Larsen et al., 2016; Phipps & Young, 2013). Despite this, to my knowledge research is yet to be carried out to explore drinking perceptions of prospective university students prior to their transition.

Unlike interview techniques, focus group discussions shift the balance of power away from the researcher, and therefore participants are more likely to feel comfortable discussing their opinions and views with similar others than in one-to-one interviews. This is particularly beneficial when the research aim is to understand alcohol expectations (Halcomb, et al., 2007). Further, Frith (2000) posits that focus groups are valuable when conducting exploratory research on under-researched topics, as the unstructured nature of a focus group yields discussion on important yet unexpected themes.

Although focus groups are useful, they are not without their disadvantages. Group discussions have a propensity for groupthink, in that members indirectly pressure others to conform to a collective opinion (MacDougall & Baum, 1997). This is especially true when discussing perceptions of risk-taking behaviours such as alcohol use. Conforming to members within the group could lead to findings that portray a relatively homogenous view towards the student drinking culture. Additionally, dominant characters may drive discussion, which may produce results that are not reflective of the entire group. However, such limitations can be overcome with good focus group moderating (Clarke & Braun, 2013).

Before the study commenced, recommendations within the focus group literature were considered. In terms of group composition, a variation of group sizes have been outlined by researchers, ranging from four (Krueger, 1994) to sixteen (Braithwaite et al., 2004). It is recommended that group size should be large enough to yield wide-ranging ideas (Dreachslin, 1999) but not so large as to inhibit members from sharing their own perceptions. Porcellato, Dughill & Sprinkgett (2002) examined the suitability of carrying out focus groups with young people and concluded that they were viable but needed to be small to uphold a high level of interest and group participation. Clarke & Braun (2013) recommend groups be homogeneous and compose individuals whom share comparable social and cultural backgrounds. From this it is suggested that a familiar social environment is created, allowing for more fluid discussion

(Liamputtong, 2011). Too much homogeneity, however, can prohibit the diversity of beliefs explored (Dreachslin, 1999). Many researchers endorse that members within the group should not have any pre-existing relationships as this can inhibit self-disclosure (Ogunbameru, 2003). Others, however, have argued that group familiarisation enhances free-flowing discussion allowing for deeper levels of disclosure (Liamputtong, 2011) where participants can challenge each other and elaborate on group experiences. Further, peers also act to manage those individuals who are prone to exaggerate which is particularly useful when discussing health risk behaviours (Kitzinger, 2005).

Based on the evidence base, it was intended that the focus groups within the study would comprise five to eight participants of the same gender, who were in the same year at school and were from pre-established peer groups. Further, it was anticipated that a selection of schools representing the diverse socio-economic conditions in Merseyside would be recruited. However, due to low response rates from educational establishments and the nature of focus groups (i.e. participants not turning up) I had to be flexible with the recruitment strategy (see Chapter 4).

3.7.2.2 Study III: Paired interview study with first year students

Study three was an interview study designed to explore first year undergraduates' experiences with alcohol as they transitioned from home to university. Data were collected during September to November 2016. First year students were recruited through a purposive multi-level sampling approach. Eleven paired interviews (N=22) were conducted in total. The researcher liaised with all interviewees to identify a convenient, quiet and accessible environment in which to conduct the interview. The majority of the interviews took place in the university accommodation show flats which the researcher had been granted access to. Written consent was obtained from each of the participants (Appendix 14). Both participants were asked to complete a demographic questionnaire prior to the interview. Each of the interviews was recorded using two Dictaphones.

In line with the pragmatic approach, the decision to use the paired interviewing was linked directly to the research question. Paired interviewing (also known as joint interviewing or pair depth interviews)

is the process in which two people are interviewed at the same time to discuss their experiences of a phenomena. The technique has been described by some as a method which fits between one-to-one interviews and focus groups and therefore benefits from the depths of interviews but the interaction of focus groups (Houssart & Evens, 2011; Wilson, Onwuegbuzie & Manning, 2016). Paired interviews are a relatively novel approach but have been used successfully in past research to examine young adults' perceptions and personal experiences (Lohm, 2011).

Unlike one-to-one interviews the paired interview format reduces the apprehension of sharing personal experiences with a stranger by creating a better balance of relationship between the interviewer and the participants. Past research found that having a supportive peer at the interview creates an informal context which puts participants at ease (Hight, 2003; Lohm, 2011). Another feature of paired interviewing is the familiarity participants have with each other's experiences which enables participants to challenge or build on each other's answers producing enriched responses to questions, with little input from the researcher (Liamputtong, 2011). Another feature which seems to differentiate paired interviews from focus groups is that paired interviews allow 'for frequent and sustained dialogue between participants' (Hight, 2003; 114). Drawing from the limitations of Study I (see Chapter 4), discussion amongst the larger focus groups were often dispersed and fragmented due to frequent interruptions by dominant group members. Thus, paired interviews were used to encourage conversation to remain on course (Wilson, Onwuegbuzie & Manning, 2016). Paired interviews are therefore thought to provide a viable alternative for collecting qualitative data on alcohol experiences than one-one interviews and focus group discussions.

Although there are many advantages to paired interviews, there are several limitations which need to be addressed. It is suggested that in paired interviews participants may feel they should be unified in sharing the same experience as their peer even if they have interpreted the situation differently (Wilson, Onwuegbuzie & Manning, 2016). Although alcohol use is a sensitive matter, the pairs within the current study knew of the topic beforehand and chose to participate together suggesting they felt at ease discussing their alcohol use with their peer. Further, it is argued that paired interviews lack the detailed personal information obtained in one-to-one interviews as the focus is not on just one participant.

However, in a recent study, paired interviews when compared with one-one interviews allowed respondents to build more comprehensive responses and augment on experiences through their discussions (Lohm, 2011).

3.7.2.3 Qualitative data analysis

Focus group discussions and paired interviews were audio recorded and transcribed verbatim, with all identifiable data anonymised. I completed the transcription of both the interviews and focus group discussions. Transcripts were analysed using the NVivo (10) qualitative data analysis programme (QSR International Pty Ltd, 2012). All data was stored on a password protected computer which only I had access to.

Thematic analysis was used to identify key patterns across the qualitative data. Thematic analysis is a qualitative analytical method that is independent of theory and epistemology and acts as a flexible approach to analysing data (Braun & Clarke, 2006). Thematic analysis provides a systematic procedure for searching across data sets for implicit and explicit themes; these are patterns or meanings that describe a phenomenon and capture something important about the data in relation to specific questions (Braun & Clarke, 2006; Clarke & Braun, 2013).

Key themes within Study I and III were identified using both deductive and inductive processes to allow flexibility to include new codes which emerged from the data. The NVivo computer programme was used to collect and organise the data. Braun and Clarke's (2006) model of thematic analysis was used to guide the analysis process; how this was achieved is outlined in Table 2.

The criticisms of thematic analysis relate to the interpretation of the data, rather than the method of analysis. The flexibility of the method can create difficulties when drawing conclusions on what aspects of the data are most important. The quantification in thematic analysis for creating a set of patterns can lead researchers to identify repetition of specific terms and overlook other aspects of the data, such as the meanings behind what is being said (Braun & Clarke, 2006). This was addressed in this thesis through coding both the meaning and repetition across the data set. Further, the coding framework was

discussed several times with my supervisor who has expertise in qualitative methodology to ensure themes were not overlooked and there was consistent application throughout the data set.

Table 2. The application of Braun and Clarke’s (2006) thematic analysis model to the qualitative phases of analysis

Phase	Method
Phase 1: Familiarisation with the data	<ul style="list-style-type: none"> • The analysis began by listening to audio recordings of the interviews and focus groups. • The recordings were then transcribed, and initial thoughts and impressions were recorded. • Each script was then carefully examined and re-examined, so I could become more familiar with the data and elicit underlying meanings and nuances.
Phase 2: Generating initial coding	<ul style="list-style-type: none"> • Data was then input into NVivo. • Folders were created in NVivo for each of the data sets. • The process continued by going through the transcripts, line by line, where interesting features of the data were given codes¹⁰.
Phase 3: Searching for themes	<ul style="list-style-type: none"> • The emergent codes which had similar content and were prevalent throughout the transcripts were then organised into clusters and given parent nodes in NVivo.
Phase 4: Reviewing the themes	<ul style="list-style-type: none"> • Commonalties were examined within and across the clusters to generate new concepts and identify new themes. • The final themes were then reviewed, and flowcharts and graphs were utilised to help visualise important themes.
Phase 5: Detaining and naming the themes	<ul style="list-style-type: none"> • Thematic networks were then used to present the core themes from the data (see Figure 4). • The themes were discussed with members of the supervisory team at several points in time. The final refinement of codes into themes led to four key themes.
Phase 6: Producing the report	<ul style="list-style-type: none"> • Thematic analysis was written up, ensuring that the presentation of analysis was logical, coherent, and non-repetitive. • Findings were discussed in relation to public health practice.

¹⁰ Codes are used in NVivo as a means of gathering and grouping all data which is specific to a topic or theme.

3.7.2.4 Trustworthiness

For qualitative research, the criteria for evaluating concepts pertaining to rigour and generalisability differ to quantitative research, with the focus being on whether research findings are transparent and present a reliable interpretation of the situation and persons studied (Bloomberg & Volpe, 2016). It is essential to demonstrate these concepts in qualitative studies so that the research findings have the integrity to make an impact on practice and policy. Researchers, such as Guba (1981) have identified criteria which can be used to measure the concepts of trustworthiness in qualitative research, which include truth value, applicability, consistency, and neutrality. Later research adapted these concepts to include credibility, transferability, dependability, and confirmability (Guba & Lincoln, 1998).

Credibility corresponds to validity and relates to how well the realities of the participants match the realities represented by the research. Although it is not possible nor the aim of qualitative research to generalise findings to larger populations, transferability is a concept which addresses the wider applicability of the study (Lincoln & Guba, 1985). The transferability of the study does not rely on the samples' representability but rather is about whether the findings can be transferred to other contexts and to other respondents. Dependability, reliability in quantitative terms, refers to the extent in which the research findings can be replicated. Unlike quantitative research which provides average experiences, qualitative research relies on exploring individual experiences. Therefore, the goal is to provide an honest representation of participants' experiences and to understand when they occur. Confirmability parallels the notion of objectivity. The implication is that the findings should be clearly derived from the data and coherently assembled (Bloomberg & Volpe, 2016). Table 3 outlines the criteria of trustworthiness based on Guba (1981) and demonstrates how this was applied to the current research programme

Table 3. The application of Guba (1981) criteria of trustworthiness and its application to the qualitative phase of research

Strategy	Criteria
Credibility	<ul style="list-style-type: none"> • Interview technique: Participants were told that there were no right or wrong answers to the questions being asked and encouraged to be honest with their answers. Probes were utilised to elicit more detailed data. • Triangulation: Several data collection methods were used within the research programme with the aim of enhancing the quality of the data and reducing inherent bias associated with mono-methods, which further strengthens the credibility of the research. • <i>(see also peer review)</i> • <i>(see also reflective commentary)</i>
Transferability	<ul style="list-style-type: none"> • Rich description of the participants and the context: According to Li (2004: 305) rich research descriptions “enable judgments about how well the research context fits other contexts”. A detailed account of the research context and the participants involved was provided at each step of the process, therefore, it is anticipated that other researchers will be able to replicate the study within similar conditions and settings.
Dependability	<ul style="list-style-type: none"> • Peer review: The findings (codes and themes) were discussed with members of the supervisory team throughout the programme of research, including the coding framework, to ensure the reality of the research adequately reflected the findings. Ongoing discussions enabled continued improvement of the research.
Confirmability	<ul style="list-style-type: none"> • Reflective commentary: A reflective diary was kept throughout the research to document the effectiveness of the methods employed, interpret the results, and guide the subsequent research stages. The reflective process was especially important in ensuring confirmability. My position as a young woman who until quite recently was a university student meant that I had undergone a similar situation to the participants I was researching. These experiences have perhaps given me a biased understanding of the use of alcohol at university; however, I was mindful of this and treated the university setting and individual experiences as unique (the researcher’s positionality is discussed further in Chapter 1).

3.8 ETHICAL ISSUES

Ethical approval was sought from the research committee at LJMU and was granted for all parts of the research. In Study II, consistent with ethical concerns over privacy and confidentiality (BPS, 2018), survey data were collected and held on a password protected computer. Halls of residence representatives received training on ethical considerations and participant confidentiality as part of their training (see Chapter 5). Student representatives expressed to eligible first year students that their participation was voluntary and that their data would be treated confidentially. A completed survey was considered as consent to participate in the study.

In Study I and III, all participants were provided with information about the study procedure. Issues relating to the right to withdraw from research participation, data anonymity and confidentiality were discussed with all participants and informed consent was acquired prior to the study commencing. All focus groups and interview discussions were coded, and identifiable data were removed from the transcripts.

Further details on ethical considerations adopted within the study are presented in each respective chapter.

3.9 SUMMARY

This chapter provides an overview of the underpinning paradigm for the methodology and outlines the mixed methods exploratory sequential design chosen for the research. The three studies were outlined; a focus group study with prospective university students (Study I), a cross-sectional survey study with first year halls of residence undergraduates (Study II), and an interview study with first year university students (Study III). An overview of the methods of the three studies was described, including research justifications. The strategies I employed to ensure rigour (validity and reliability in the quantitative phase and trustworthiness in the qualitative phase) were then outlined. Finally, the chapter discussed the ethical implications of conducting the research and what steps were taken to ensure participant safety. The next chapters present the findings from the three studies, presented individually for Study I

(Chapter 4), Study II (Chapter 5), and Study III (Chapter 6), and concludes with the mixed methods synthesis and general discussion (Chapter 7).

CHAPTER 4: PROSPECTIVE UNIVERSITY STUDENTS' PERCEPTIONS AROUND ALCOHOL USE AT UNIVERSITY- STUDY I

4.1 INTRODUCTION

This chapter presents the key findings obtained from seven focus groups conducted with school and college students who were planning to attend university. There is a plethora of literature which associates misperceptions of peer drinking norms with higher levels of consumption. However, to date few studies have delved into students' perceptions of the culture of drinking at university and the expectations that incoming students arrive at university with. Globally, this study is among the first of its kind to explore the development of young adults' perceptions of students' drinking prior to them arriving at university. Understanding students' conceptions of student alcohol use may be significant in understanding the embedded nature of excessive alcohol use and the reinforcement of cultural drinking norms at university and could arguably create opportunities to challenge, re-frame and modify beliefs at a crucial developmental time-point.

4.2 AIMS AND RESEARCH QUESTIONS

The study aimed to explore the perceptions of alcohol use at university in prospective university students living in the Merseyside area. More specifically, the research questions were:

1. What are prospective students' perceptions of alcohol use at university?
2. What informs the development of prospective students' perceptions of alcohol use at university?

4.3 METHOD

4.3.1 Sampling strategy

The research sample consisted of prospective university students who attended a high school or college in the Merseyside area. Participants were recruited through a purposive sampling technique where recruitment packs including a letter of introduction, consent form and participant information sheet

were sent to all heads of sixth form and colleges within the Merseyside area (78 in total), inviting year twelve and thirteen students (aged 16-20) to participate in a focus group. Due to the nature and timing of the research, which fell around the A/AS level examination period (June 2016) I aimed for a minimum of six focus groups from at least three local educational establishments (providing two focus groups per college/school) (see Chapter 3 for focus group sampling rationale). Initial response rates were low, with only one institute agreeing to participate in the research (school N=1)¹¹. An alternative recruitment approach was therefore adopted in the September of 2016¹². Eligible institutions were once again contacted, this time via email, where a further two educational establishments (college N=1, school N=1) gave assent. Seven group interviews were conducted in total (N=46), with the number of participants in each group ranging from four to eight, including both mixed- and single-sex groups (see Table 4). The seven groups were self-selected by staff at the school and included class peers.

4.3.2 Interview schedule

A semi-structured focus group interview schedule was developed around the principal research questions (Appendix 6), linking to two core discussion themes (1) perceptions of the drinking culture and role of alcohol at university, and (2) the influences on these perceptions. Careful attention was paid to the sequencing and language of the schedule to ensure that the young adult audience could comprehend the types of question being asked. Items were kept open-ended and concise and were conducive to a conversation. The moderator's guide was piloted across postgraduate students at the Public Health Institute, LJMU. Piloting led to discussions around appropriate ways to elicit information from young adults, who in previous studies have been found to be susceptible to peer pressure and prone to give short and non-descriptive answers (Peterson & Barron, 2007). A decision was made to include an introductory icebreaker activity, which explored participants' knowledge of the recent weekly UK government recommendations (Department of Health, 2016). The stimulus material was utilised to commence discussion and reduce apprehension amongst the young adult audience (Gibson, 2007) and was not used in the analysis of this study. The focus group interviews were semi structured and minimal

¹¹ I received 3 responses from other colleges which stated that the study was too close to students' examination period.

¹² A period of time where no scheduled exams were timetabled.

probing (e.g. “can you explain that further?”) was used to encourage groups to talk freely around the scheduled topics.

4.3.3 Procedure

In accordance with Research Councils UK Guidance, ethical approval was sought from LJMU’s University Research Ethics Committee. Initial consent was granted from the head teachers at the cooperating educational establishments (Appendix 2). As per the selection criteria, all research participants had to have the intention of attending university. College and high school staff self-selected students to participate in the focus groups, these groups were made up of class peers. Formal consent was obtained from the students prior to the focus group interview (Appendix 4). The researcher liaised with college/high school staff to identify a convenient date and time to conduct the interviews.

Focus groups were held during school hours and were conducted in a private room at the school/college, which was an accessible and familiar environment for all participants. Participants were informed at the beginning of the discussion that they were permitted to omit questions they felt uncomfortable answering and could leave the focus group at any time. Additionally, the participant information sheet was explicit about the scheduled topics of discussion and signposted website links to alcohol support services (Appendix 3). Post-discussion, participants were debriefed and given the opportunity to ask questions. Anonymity was paramount however, as with any focus group study confidentiality cannot be guaranteed. Prior to the focus group commencing, all participants were asked to respect the principle of confidentiality throughout and beyond the discussion. Participants were reassured that all the information collected about them during the course of the research would be kept strictly confidential and their responses would be anonymised and stored securely on a password-protected hard-drive. Due to the limited availability of the college students the principal researcher moderated five of the groups and a fellow researcher at the Public Health Institute moderated two of the focus groups. Focus group discussions lasted between 45 and 60 minutes.

4.3.4 Research participants

In line with recommendations (Clarke & Braun, 2013) the focus groups were homogenous in nature in terms of education and age and consisted of pre-existing peer groups. Three fifths (57%, N=26) of the sample attended a college in the Merseyside area with a high score of deprivation. 43% (N=20) of the sample attended one of two single sexed high schools in the Merseyside area with a low score of deprivation (Department for Communities and Local Government, 2015). Of the sample, 44% (N=20) were female and 57% (N=26) male. The majority of the sample were White British (96%, N=44). In terms of alcohol use, 20% of the the sample did not drink alcohol. Of those that drank (N=37), two fifths (38%) drank monthly or less, almost half (48%) drank two to four times a month, 19% drank two to three times a week and 5% drank four or more times a week.

Table 4. Focus group sample profiles

Focus group number	Recruitment source details	IMD quintile of Institution ^a	Ethnicity of participants	Age (years) range of participants	Number of participants	Sex of participants	Current Drinkers N(%)	Consume alcohol at least 2-4 times a month N(%)
1	High school	2 nd	White: (100%)	All 17	8	All female	7(88)	4(50)
2	High school	2 nd	White: (80%); Asian: (20%)	16-17	5	All female	3(60)	2(40)
3	High school	1 st	White: (100%)	17-18	7	All male	7(100)	2(28)
4	College	5 th	White: (100%)	17-20	5	Mixed	3(60)	2(40)
5	College	5 th	White: (100%)	17-19	8	All male	8(100)	8(100)
6	College	5 th	White: (100%)	18-19	8	All male	7(88)	3(38)
7	College	5 th	White: (100%)	18-19	5	All female	5(100)	4(80)

^aThe IMD is the official measure of relative deprivation, which combines information from seven domains to rank small areas in England from 1 (most deprived area) to 32,844 (least deprived area) (Department for Communities and Local Government, 2015).

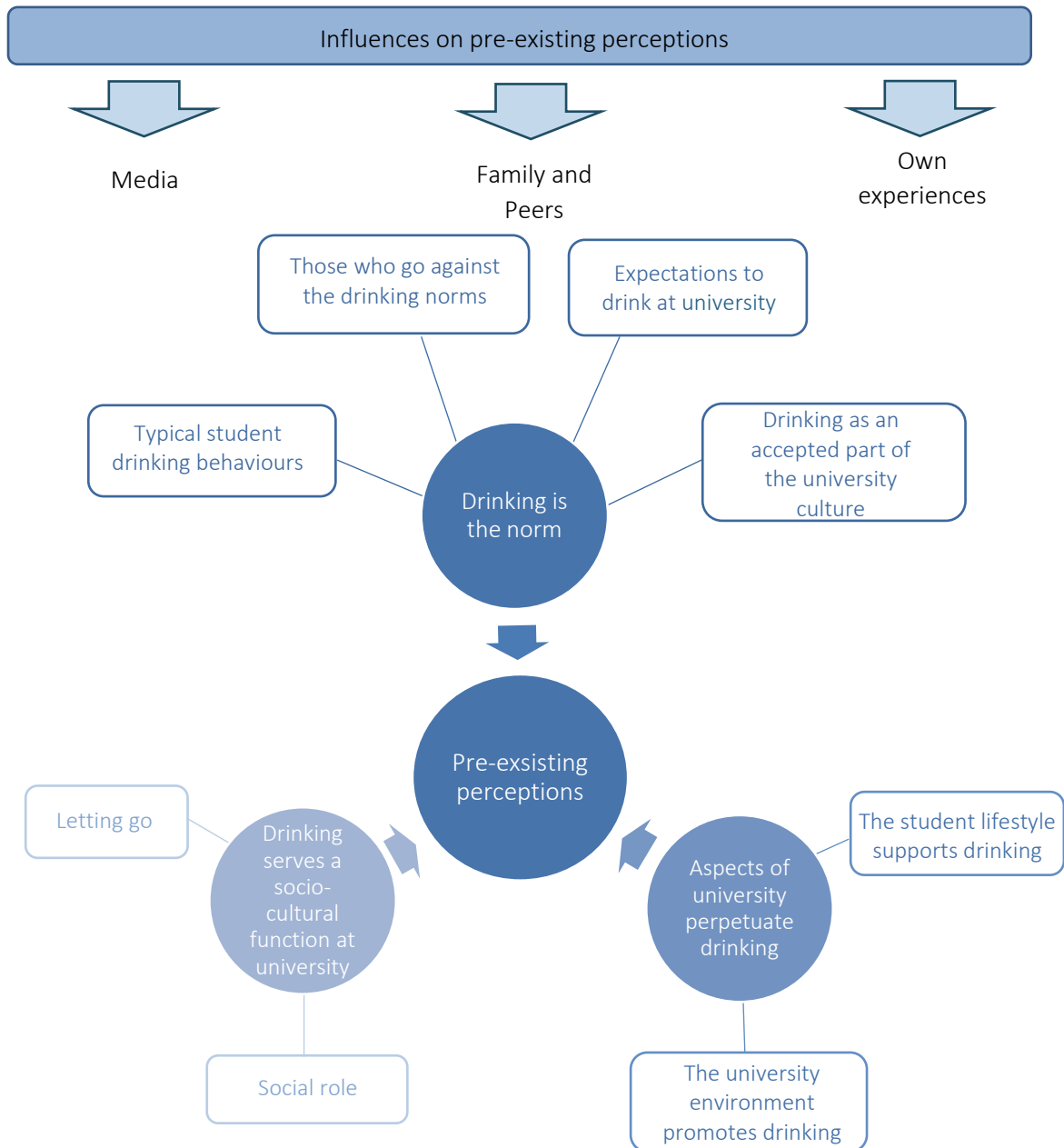
4.3.5 Analytic approach

Group interviews were digitally recorded and transcribed verbatim, with all identifiable data anonymised. Transcripts were analysed using the NVivo (10) qualitative data analysis programme (QSR International Pty Ltd, 2012) and adhered to the six phases of thematic analysis set out by Braun and Clarke (2006) (see Chapter 3 for detailed analysis process) where initial discursive codes were identified. Each script was then carefully examined and re-examined to elicit underlying meanings and nuances across the data, and subsequently emergent codes were organised into clusters. Figure 4 shows the four emerging themes from Study I.

As there is no definitive rule for calculating the mandatory sample size in qualitative research, many published works cite “data saturation” as the principal method for calculating nonprobability sample sizes. Data saturation is reached when no additional new information is elicited from the data (Ando, Cousins & Young, 2014; Morse, 1995). Within the study, thematic saturation was considered achieved after approximately five of the focus groups as no new codes or themes emerged from analysis, after conducting seven focus groups I decided to stop recruitment.

4.4 RESULTS

Figure 4. Thematic network map of emerging themes in Study I



4.4.1 Theme I: Drinking is the norm

'Drinking is the norm' captures the perception that drinking at university is an accepted behaviour carried out by the majority of students. The theme further draws on the expectations of drinking at university, the normalised drinking behaviours of students and the unfavourable opinions around those who do transgress from the norms of drinking.

4.4.1.1 Drinking is an accepted part of the university culture

The prevailing view at both a group and individual level was that drinking at university is a normal behaviour carried out by the vast majority of students: *'Everyone is doing it, it has just kind of become the norm'* (Male college focus group 6).

P1: *I would probably say like a high percentage of students drink*

P2: *Not a 100%, maybe like 90% or something would at least go out every night*
(Male high school focus group 3)

P1: *I think alcohol is part of the culture at university, I don't think you can stop it*

P2: *Yeh there is far too many people that do it to stop it now*
(Male college focus group 5)

Clearly, participants had constructed views on what it means to become a university student, with many considering drinking to be synonymous with student life: *'Like that is what you do when you become a student [drink alcohol], everyone knows that'* (Female college focus group 7). Alcohol was also perceived to be ingrained in many aspects of university such as socialising, watching sport, relieving stress, and celebrating. Few participants discussed socialising at university without mentioning the role of alcohol.

P2: *They drink at most social occasions I bet*
(Female college focus group 7)

P1: *I think it becomes quite like a normal thing, even if it's just like a day thing when watching football matches or like relaxing with your mates, you all go and just have a drink*
(Female college focus group 7)

Several female students within the two high school groups described the long associations between alcohol and students. They discussed students' drinking as a tradition in which drinking rituals and customs of previous generations are passed down to new incoming students. They felt like this had reinforced excessive drinking within the university setting and created a nonchalant attitude towards students' alcohol use across society: *'Its stemmed from people you know who have been to uni and it just passes down doesn't it and now just everyone does it so no one really cares'* (Female high school focus group 2).

P1: *I think cause it's like tradition like people just do it now [drink], just go mad*

P2: *It's part of the culture isn't it, so yeh it is kind of like a tradition [...]*

(Female high school focus group 1)

4.4.1.2 Expectations to drink at university

As drinking was assumed to be integral to student life, participants across the groups felt that there are cultural expectations to drink at university. Groups differentiated between types of pressure, referring to indirect and direct forms. The theme also captures how prospective students expect their own drinking behaviour will change upon entering university.

With the perception that drinking at university is a socially accepted behaviour, several participants felt that there are cultural expectations to drink which come with having student status.

P1: *Cause they're uni students it's accepted, and that is what they do, it's kind of expected of you*

(Male college focus group 5)

P1: *Like I know people who I went to school with at sixth form and they just didn't touch a drink and now that they have gone to uni they're out every day so I think it is university in general, cause it's like expected that students will drink all the time and do what they want*

(Female high school focus group 2)

A large majority of the sample alluded to the pressures of social conformity. Students were presumed to drink because they feel compelled to in order to fit in with those drinking around them. Participants recognised that as alcohol is consumed within a social setting at university it would be easy for individuals to get ‘lured’ into drinking and therefore avoiding alcohol would be difficult: *‘At uni there would be a lot more like, not like pressure but if everyone around you was drinking, it would be harder to not drink wouldn’t it’* (Female high school focus group 1). This was thought to be especially true in the initial weeks of university when new social relationships are formed in an alcohol-dominated environment.

P1: *I reckon they get lured in, cause if you’re like studying and your mates come to you, ‘oi are you coming for a drink’, like it would be hard to refuse, so I reckon they would just want to go with them*
(Mixed college focus group 4)

P2: *You also like want to fit in so in the first week you might feel like you have to drink*

P3: *Yeh like you should drink, like cause everyone else is*
(Female college focus group 7)

Others felt that the expectations to drink at university would extend to more direct pressure to consume alcohol. For the most part, participants within the female high school groups assumed that the refusal of alcohol or not going out may lead to coercive pressures to drink from peers and that these social pressures would be greater for males than they would be for female students. In contrast, one female individual felt the cultural narrative around university, which presents drinking as a pressured activity, is most likely exaggerated: *‘I think people make out that there is going to be a lot a peer pressure at uni, like you’re told you will go to uni and drink loads but I think like it’s a lot more causal than it is made out to be’* (Female high school focus group 2).

P1: *It’s different for boys then it is for girls like if I wanted to stop at like 10 [drinks] then everyone would be like, okay, whereas if they did it [males] everyone would be like no no keep going*
(Female high school focus group 2)

P1: *And its sort of a little bit of pressure on some people*

P2: *Cause some people would be like oh why aren’t you coming out do you know what I mean*

P1: *Yeh cause if all their mates are going out but they don't want to it's likely that their mates are going to make them go out even if they don't want to*
(Female high school focus group 2)

Although all groups recognised that there would be an expectation to drink at university, there was consensus across and within both high school female groups that these social pressures could be resisted: *'You don't have to drink when you go out you can just like choose not to drink or if you want to drink'* (Female high school focus group 2). Being able to resist the normalised student drinking culture was thought to be dependent on the *'type of person'*, with participants suggesting that those individuals who are *'easily led'* and have a desire to gain positive evaluations from peers more likely to give into drinking pressures.

P1: *Yeh I do kind of think it does depend on the person though because if they are easily led then they might like start drinking even if they don't want to just so people like them*
(Female high school focus group 1)

Prospective students were asked to envisage how their own drinking behaviours may change upon entering university. The popular view across all groups was that individual drinking, preloading and drinking game participation would increase at university, with the majority of participants agreeing that this change would be: *'Because everyone is doing it around you all the time'* (Male college focus group 5).

P1: *I think I would start drinking more*
P2: *And cause you are in the dorms, there will definitely be more drinking games*
P3: *I go out drinking quite a lot now but I still think it will increase*
(Male college focus group 6)

The view that alcohol would increase upon entry to university did not vary by current drinking status and resonated across those who currently abstained from alcohol. Two female non-drinkers described how they expected to initiate drinking at university however, they commentated that they would go about this with caution.

P1: *It definitely increases from this age to going to uni*
P2: *Yeh I think because everyone is doing it around you all the time then yeh you would drink more*

P3: *Well I don't drink at all so it probably will, I think I will be cautious cause it's just not something that I have ever really done before, but I am definitely open to try*

P4: *Yeh same*

(Female high school focus group 2)

Contrary to popular belief, one participant felt his own drinking levels would decrease upon entering university. He raised the fact that as he had become accustomed to drinking, he no longer finds the effects of alcohol exciting.

P1: *I think it would go down personally, cause we are already at the age where you've been drinking a while so it's less of a how do I put it, it's less of exciting to drink, so you drink it less.*

(Male college focus group 5)

4.4.1.3 Students engage in excessive and risky alcohol consumption

Whilst there was a diverse range of answers around how often and how much students drink, the prevailing view at both group and individual level was that most university students consume large volumes of alcohol frequently with the intent to get drunk and that this behaviour is more extreme than the drinking behaviours of college and high school students.

P1: *I would say 10 [drinks]*

P2: *No, I'd say more than that*

P3: *I'd say like 15-20 maybe*

(Female college focus group 7)

P1: *More than average*

P2: *Too much ((laughter))*

P3: *More than we drink definitely*

(Female high school focus group 2)

Perceptions around how much and often students drink varied from 10-20 drinks during a night out and once a week to three times a week respectively, however among a small number of participants there was a more extreme view that students drink every night of the week.

P1: *I know people in uni and they drink most nights*

P2: *Even in class and that*

(Male college focus group 5)

P1: *Every night*
P2: *To be honest I can imagine it is pretty often*
P3: *They're on it every weekend*
(Male college focus group 6)

Contrary to popular opinion, several individuals within the male high school group felt that getting drunk was not the sole aim of all university students and presumed that those who had such intentions would suffer social repercussions.

P1: *I doubt it's all just for getting off your head*
P2: *I think it would be for some people though, like that is what they are expecting to do at uni*
P3: *I don't think there are many that go out to drink and get drunk, I think they go out to have a night out and then they just end up drinking you know*
P1: *You would be bullied for being an alcoholic'*
(Male high school focus group 3)

Freshers' week in particular was an event that stood out to prospective students as being heavily related to drinking. A common view held by participants within and across the groups (N=4) was that during this event, students go beyond the normal levels of drunkenness and past their own personal drinking limits. With several participants using strong adjectives such as 'crazy' and 'madness' to describe the event. Commentary around Freshers' week revealed that participants felt that the high levels of alcohol consumed during this period would be unsustainable: '*At the start of freshers you're going to drink loads but you can't keep up drinking like that [...]*' (Male high school focus group 3). Many agreed that students' relationship with alcohol would change and the excitement of getting drunk every night would taper off.

P1: *It's like beyond binge drinking though, it's like a different level*
P2: *It's not like sensible drinking it's like find your limit and then go like way past it*
P4: *The first bit, freshers you will drink loads but then I think you start feeling bored of it*
(Female high school focus group 1)

P1: *It's crazy isn't it*

P2: *Yeh it's just like madness like it's like the first taste that people get of like being away from home. It is like people being on holiday I think, it's that sort of feeling that everyone just goes crazy*
(Female college focus group 7)

When discussing specific drinking practices, it was clear from the narratives that preloading and drinking games were rituals that were perceived to be characteristic of students' drinking. In its simplest form, preloading was described as consuming alcohol socially in a group setting prior to going out to a club or bar. The majority of drinkers within the sample had preloaded and participated in drinking games at college or high school, however, for most engagement was uncommon: '*We will drink at home before we go out but it's not very often, like drinking games are not a big thing now*' (Female high school group 2).

P1: *There are loads of drinking games [at university], I think it kind of makes pre-drinking more fun*
(Female high school focus group 2)

P1: *Yeh like loads of drinking games, that's all it is*
P2: *And pre-drinks as well in their student accommodation*
P3: *They just do it with their mates all the time before they go out*
(Male college focus group 5)

P1: *I think there will be a lot of drinking games, more than we do now*
P2: *Cause they do it to like meet new people don't they*
(Female high school focus group 1)

Individuals within and across the groups (N=4) consistently referred to the financial restraints on university students: '*Students don't have much money though do they, so they have to drink on the cheap*' (Male high school focus group 3). In many cases, students were presumed to adopt cost reducing strategies to minimise the amount of money they spent during a night out. Preloading in particular was thought to offer a cheaper alternative to spending alcohol at on-licensed premises as students could buy cheap multi-packs of alcohol from local supermarkets before heading out for the night: '*I know they drink at their home so they don't have to spend as much money when they go out*' (Female college focus group 7).

P1: *Because it's cheaper to pre-drink*
P2: *Yeh definitely getting the cheap stuff in so then you have had more earlier, so they*

don't have to buy stuff when they are out
(Female high school focus group 2)

Economy drinking was thought to also factor into university students' beverage choices. Within and across five of the groups, cheap spirits were perceived to be a common choice for students as they were a cheaper alternative and they: *'have a high percent so they can get students drunk quicker'* (Male college focus group 6). Further, across two groups, several individuals felt that students prioritise alcohol over other amenities, such as food to help reduce monetary costs: *'they don't have much money so I think maybe at university drinking might come above food'* (Female college focus group 7). However, this perception was challenged by other members within the group: *'no, I don't think you would starve just so you could get pissed'* (Male high school focus group 3).

P1: *Cheap vodka doubles*

P2: *They are more likely to be going for the cheap drinks*

P3: *Yeh, oh definitely, the cheap stuff hits you quicker as well*

P1: *The strongest and the cheapest it will definitely be*

(Male college focus group 5)

4.4.1.4 Non-drinker consequences

This sub-theme explores prospective students' opinions of those who do not conform to the norms of drinking at university. Within this theme, participants discuss their thoughts on what life as a student non-drinker is like and the role that non-drinkers assume during a typical university night out. When discussing student non-drinkers, there were notable differences in the opinions observed between those participants who currently abstain from alcohol and those who drink.

All groups referred to some of the challenges that non-drinkers may experience at university, which included non-acceptance, pressure, and isolation. It was felt that those who transgress from the norms of drinking would miss out on shared social experiences and would therefore feel *'left out'* and *'isolated'* from the rest of the student population. With this view, abstention at university was considered to bring about significant social costs: *'drinking is a big part of going out and having a laugh, so they [non-drinkers] may feel left out if they are not going out, they are not meeting people are*

they' (Male college focus group 5). Some felt that non-drinkers would form friendships with other non-drinkers in order to seek inclusion and that these social experiences would not parallel those of a drinker.

P1: I think those people [non-drinkers] are probably more lonely, just from the fact that they feel left out of things

(Male high school focus group 3)

P1: I think if you don't drink while you are in uni you are probably going to struggle a bit on the social side, cause (...) well it just won't be as fun

P2: But then you would make friends with the people, the others who don't drink, so you would have a social life, but probably in a different way

(Male high school focus group 3)

It was presumed that whilst non-drinkers would still attend social events, sobriety would be unpleasant. In addition, sharing social living spaces with people who drink was thought to be tedious and disruptive especially when drinkers returned home late and drunk from a night of heavy drinking. With this view, several group members felt that university would be an unpleasant experience for non-drinking students.

P1: It's got to be horrible as well cause the dorms are like really poorly built and they are trying to get kip and it's like thin walls and that isn't it

P2: And people coming in at 4 in the morning

P3: And getting woke up all the time

(Male college focus group 5)

P1: If you like going out (drinking) you're going to enjoy being a student more aren't you, then someone who doesn't drink, I think they would find it hard to be honest

P1: But it's expected isn't it, like at uni so you can't really get annoyed. [...]

P2: And if you're sharing accommodation with them then and they are coming back drunk and you're sober then it would just be awful

P3: I'd stay at home if I was like that, I would literally stay at home

P4: I would, I think that is the choice you make if you're not into that it's expected that you live at home

(Female college focus group 7)

Participants expected that non-drinking students would assume the role of sober minder during a night out. This would involve caring for peers who had drunk excessively and making sure they got home safely, such discussions encapsulated how frustrating and undesirable this role would be.

P1: Yeh but then you're the one that has to look after everyone when they're drunk and that is just like awful

P2: *Mother hen*
P3: *It's not fair for you to always be the one*
P1: *Cause then that's your experience that gets ruined*
(Female high school focus group 1)

Contrary to the opinions of participant drinkers, non-drinkers challenged the view that abstention at university would lead to isolation. Drawing from their own experiences of abstention, these participants felt that student non-drinkers would still share the same social experiences of drinkers and that a night of not drinking would still be an enjoyable experience at university: '*They still have a good time without getting drunk*' (Male high school focus group 3).

P1: *Quite isolating*
P2: *I don't think so cause you still go out, like I don't like the taste of alcohol and I go out now and enjoy myself, I don't think it will be much different*
P3: *But then when you're like surrounded by people like drinking... like drinking all the time*
P4: *But I would go out and won't feel forced to drink I would just drink water or something but I would still go out and enjoy myself*
(Female high school focus group 1)

4.4.2 Theme II: Aspects of university perpetuate drinking

This theme captures participants conception of the physical university environment as a setting which is conducive to excessive student drinking. The theme further explores the student lifestyle as separate from that of non-students, in which those attending university are considered to have fewer responsibilities and more independence and freedom than other sub populations, thus contributing to heavy drinking.

4.4.2.1 The university environment promotes drinking

Aspects of the physical environment at university were thought to be conducive to heavy drinking among students. Within this sub-theme, prospective students refer to the wider drinking context, the accessibility of alcohol at university and student living arrangements.

Across students' narratives the importance of the wider drinking context on the student drinking experience was referred. A varied nightlife was seen to be part of the attraction when choosing which university to attend: *'Its important [the nightlife] cause I wouldn't want to be at a uni and there be nothing to do'* (Female college focus group 7). The more prestigious universities which market themselves on their academic achievements such as, Oxford and Cambridge, were assumed to have less of an affiliation with alcohol. Several participants drew conclusions that the student social life at these universities would be *'boring'* as they *'offer fewer drinking opportunities'*.

P1: *Yeh I couldn't, if I was going to uni I would want to go somewhere where there is a good nightlife that is the most important thing*

P2: *Definitely, cause it adds to the experience of being at uni*

P3: *Just think of freshers, how bored would you be though if there was no nightlife like if you went to somewhere like Oxford, there wouldn't be anything to do*

P4: *Yeh and I do want to go at some point [to university] but more for like the social side of things and then I realised like you do actually have to go and like study sometimes*

(Female college focus group 7)

Participants across five of the groups referred to cities such as Newcastle, Leeds and Liverpool as having a long-standing reputation for excessive drinking. These popular cities were perceived to have a high density of drinking venues offering more variety to students, thereby providing a *'better student experience'* (Female college focus group 7). Several students spoke of how they had received pre-admission information from these universities in which alcohol had been advertised as a particular feature of the social life.

P1: *I have been sent a few uni leaflets in the post and they have been full of students out drinking*

P4: *Yeh same actually*

(Female high school focus group 1)

Within similar discussions, male group members described how they had exhausted the nightlife available to them locally, therefore attending a university in a new city with a diverse range of drinking establishments would offer more exciting drinking opportunities.

P1: *Leeds, yeh that is meant to be mad*

P2: *Yeh and Newcastle, is meant to be a mad one too*

P1: *That is. 'Cause it's renowned for it though*

(Male college focus group 5)

P1: *I am excited about everything about uni, like about the whole drinking thing like I am just pretty excited to go out to all these new places at university and drink more often do you know what I mean, I have been on the Wirral, for ages now*

P2: *Yeh we have been out everywhere at home, I am even more excited to just experience how the new nightlife works*

(Male high school focus group 3)

Alcohol at university was thought to be both cheap and freely available: *'It's everywhere [alcohol at university] isn't it?'* (Male college focus group 5). Through drinking in the local nightlife environment study participants across four of the groups were aware of student aimed events and low-price alcohol offers heavily promoted in student dense areas: *'I think it's more readily available at university like with all the student aimed nights and that'* (Female high school focus group 2). From this, it was felt that the surrounding university environment encourages the use of alcohol rather than simply tolerates drinking.

P1: *It's advertised isn't it, students' nights, there are loads of offers I bet it makes you wanna go out and drink*

(Male college focus group 6)

P1: *Drinks are cheaper as well during freshers, so they will drink more*

(Female college focus group 7)

P1: *It will be more available at uni, like you get promotions and stuff don't you when you're a student*

(Female high school focus group 1)

All participants within the female high school groups presumed that events at university place great emphasis on drinking alcohol and that there would be few activities on offer that would be aimed at non-drinking. This view was different from that of males who argued that non-drinking events would exist but assumed that they would be less popular than alcohol centred events: *'There would be other things to do apart from drinking but not as many people would necessarily go'* (Male high school focus group 3).

P1: *I doubt there would be anything, like events or anything that involves not drinking*

P2: *Yeh I can't imagine there will to be honest*

(Female high school focus group 2)

For the most part, participants across the college groups believed university to be a permissive environment which lacks rules and regulations and felt university officials and staff hold a relatively liberal attitude towards students' drinking: '*I just don't think anyone cares*' (Female college focus group 7). This nonchalant attitude towards students' alcohol use was thought to enable students to act in ways that would have potentially been reprimanded at school or college:

P1: *I think part of going to university is the whole independence thing. At uni it is acceptable to go out drinking and not turn up to class. At school your parents would have got told if you didn't turn up but at uni not gives a shit [...]*

P2: *There's not much they can do really*

P3: *It's out of their control, really*

(Male high school focus group 3)

Groups presumed the layout and location of student accommodation acted as a predictor of excessive student drinking. Student residency was thought to provide a flexible living environment in which alcohol is consumed in a shared and open social space. Groups supposed that this communal living space would induce pressure to conform to the norms of group drinking.

P1: *It would probably happen more as they have like student accommodation, so it would be what everyone else would be doing it, so it becomes more of like a group thing which would make not drinking hard*

(Male high school focus group 3)

P1: *Well they are all in dorms aren't they so it's going to be easier, they will just be drinking in a massive group, like drinking games and that*

(Male college focus group 5)

One female participant commented on the geographical positioning of student accommodation, here she describes the close proximity of halls of residence to local bars and nightclubs and conceived that this would '*Make going out easier, as living nearby means you can just walk home*' (Female high school focus group 2).

4.4.2.2 The student lifestyle facilitates drinking

Within the sub theme '*the student lifestyle facilitates drinking*', participants viewed the time spent at university as distinct from any other life phase. Student life was seen as a break from adult responsibilities, a time of independence and freedom and the last chance to explore new behaviours before the realities of adulthood begin.

Emerging from four of the groups was the view that university students are a distinct population separate from the rest of society: '*You can just tell students a mile off can't you, just like every time I see students out, they are just knocking them back like it just doesn't even count to anything [...]*' (Female college focus group 7). The time spent at university was regarded as different from what comes before and what will follow studenthood, such as adulthood which participants associated with a career, family responsibilities and financial strain. As such, time as a student was thought to offer a break from reality and the last chance young adults get to have fun and experiment in new behaviours, including heavy drinking.

P2: Yeh it's different for students as well like they don't have a full-time job or like family to look after so it's kind of the last chance you get before you get a job to go mad

(Female high school focus group 1)

P1: Cause it's the last chance people get to drink isn't it really, like when you go off to uni there is almost like there is no excuse not to drink cause you are at the age where you don't have a family or whatever

P2: Yeh you can just enjoy yourself without worrying about the impacts

(Female college focus group 7)

In most cases, university was viewed as a time of gaining independence. Participants highlighted that university represents the first time in their lives where they would have no legal parameters restricting their drinking and would therefore finally have responsibility over their own behaviours (the legal age of drinking in the UK is 18 years). Having this new-found independence was thought to provide an opportune time to experiment with alcohol and other substances in an open and accepting environment, where the rules and boundaries enforced at home no longer exist.

P1: *People our age you're not really allowed to drink are you so as soon as you go to uni and turn 18, you can do what you want*

(Female high school focus group 2)

P1: *Cause when you go off to uni there is almost like there is no excuse not to drink cause you (...) you are all at the right age, it is like a perfect opportunity*

(Male high school focus group 3)

P1: *You can stay out like however long you want, like you've got free range*

P2: *Yeh for like the first time you've got no parents telling you what to do, you can kind of go do what you want, I kind of think that that is a big reason why people will just kind of go out like whenever they want*

(Male high school focus group 1)

In one instance, a female participant described the restrictions she faces currently at her parental home, here she describes how university will provide a sense of anonymity where her drinking can be concealed from her parents.

P1: *I think also, cause you are away from home and it's probably like the first chance you've got to actually like let yourself go and have a good time. Cause when you are at home you are like oh yeh I will be back by twelve or whatever and you can't be too drunk you know like with your mum and dad. But then as soon as you go to uni it's like do whatever you like isn't it they won't find out*

(Female high school focus group 2)

In addition, there was consensus across and within the groups that the student lifestyle offers more free time to go out drinking. Specifically, students assumed that their university timetable would be less structured compared to school or college. This was thought to be especially true in the first year of university, where in most cases students were aware that they only needed a certain percentage to proceed into the second year: *'Like first year you only need to get a certain percentage to actually get through into the next year [...]'* (Female high school focus group 1). The knowledge of first year institutional practices gave several participants the impression that it would be possible to miss class during year one as.

P1: *Don't most people just skip the lecture in their first year*

P2: *There's some people that go to a couple and then they realise that they just put them on the PowerPoint anyway, so they just don't go 'cause they know that they can just go online and get it all on the computer straight there, so you kind of can go out the night before*

P3: *Yeh cause they normally only go out on a weekday as well cause they're not bothered about uni the next day*
(Male college focus group 5)

Further, participants made explicit associations between alcohol use and degree courses, with those who were on 'Less demanding courses' such as 'English' or 'History' thought to have less workload and contact time and therefore more free time to drink.

P1: *I reckon it differs across people doing different courses*
P2: *Yeh I want to do like a really academic course so everyone probably doing my course will be like studying all the time*
P1: *But then you get people doing English (laughter)*
P3: *Yeh they probably have more of a social life than those who were (..) doing 30 hours a week*
(Female high school focus group 3)

4.4.3 Theme III: Drinking serves a socio-cultural function at university

The emergent theme '*drinking serves a socio-cultural function at university*' draws on prospective students' preconceptions of the positive outcomes of drinking at university. Overwhelmingly, alcohol was presumed to have symbolic importance in aiding socialising and group formation and a role in letting go; both in terms of having fun but also as a relaxant to deal with the stresses of university.

4.4.3.1 Alcohol acts as a social lubricant

This key sub-theme considers the role of alcohol as a tool which could be used to overcome anxieties, ease social discomfort and secure new friendships at the start of university life.

When asked what participants' primary concerns were around the move to university, overwhelmingly concerns related to new peer relationships and social integration: '*Like I am scared to like move and not know anyone and not make any mates and stuff like that*' (Female college focus group 7). As a means of overcoming such anxieties, study participants believed that alcohol could be relied upon in the early stages of university to reduce social discomfort, '*Gain confidence*', and strengthen new peer relationships; therefore enabling individuals to socialise more effectively: '*I think at the start as well*

like it'll [alcohol] break the ice with people, you know, like make them more confident' (Female college focus group 7).

P1: *I am not that great at like initiating conversation with someone but that is where drinking comes in*

P3: *Yeh drink helps, that is what drinking does*
(Male high school focus group 3)

P1: *I think that, that is one of the reasons why people drink quite a lot in freshers' week probably is 'cause it is a bit easier to get to know people if you're like less nervous yeh.*

P2: *Less nervous aren't you*
(Female high school focus group 2)

Drinking was considered at an individual and group level to be a behaviour which most students transitioning into university have in common and can identify with: *'Like at the beginning, it's something that everyone is doing and you do it, so I guess it would make you feel more comfortable around people'* (Male high school focus group 3). Across the narratives, drinking alcohol was believed to gain social approval from unfamiliar peers and therefore ease the transition into new social groups. The importance of alcohol in successful integration into new social groups also links back to the sub theme *'Those who go against the norms'*, in which not drinking at university is considered by those who drink to bring about significant social costs.

P1: *'Cause everyone is doing it so it helps you make friends*

P2: *They wanna be everyone's mate so it helps you fit in*
(Male college focus group 6)

P1: *I think it will be at the beginning, like if you are trying to fit in, like make friends especially if you have come on your own, like you'd try and find ways to fit in and make friends*

P2: *And that is what everyone is doing isn't it, drinking, so that is how you fit in*
(Female college focus group 7)

Not only was alcohol viewed as essential when making new friends, it was also seen to be important in securing friendships. One group of female participants spoke of the camaraderie that a night of drinking creates. Sharing drunken entertaining stories and experiences was viewed as a way of establishing a sense of commonality and strengthening new friendships.

P1: *I think people do it as a like as a way to socialise when you're young and from then on when you're drunk you just have like stupid drunk stories to tell and then like they just continue being friends from there, that sort of thing just as a way to socialise*

(Female college focus group 7)

Drinking rituals such as preloading and drinking games, discussed in the sub-theme '*Typical student drinking behaviours*' were presumed to be popular student drinking activities which have important social functions. These rituals were valued by participants who described them as fun activities which aid group inclusion and interaction. One female participant presumed that drinking games would take the pressures off socialising by easing social discomfort among unfamiliar peers: '*Like if they don't know each other that well drinking games kind of makes talking to each other easier I bet*' (Female college focus group 7). Others, within the female high school group, presumed that participating in drinking games would allow students to show off their drinking ability, such as drinking speed, quantity and endurance in order to gain positive evaluations from peers in the initial weeks of university.

P1: *They wanna be everyone's mate so it helps you fit in*

P2: *It's a laugh innit*

P3: *Yerr it gets you talking to new people and that*

(Male college focus group 6)

P1: *So, you can make friends, doing it and you*

P2: *It's just like fun*

P3: *You can show off as well (laughter)*

P4: *Cause you want to make a really good first impression especially if its fresher week and you don't know anyone and games can do that*

(Female high school focus group 2)

The social role of alcohol was considered by females within one of the high school groups to be less important in the second and third year of university. It was assumed that once students develop an established group of friends, drinking would become less important in the social processes of friendship and therefore drinking would taper off.

P2: *I think as you as you go further up through uni it is still going to be still social isn't it but you would have established who you're mates with by that point, but you would be going out to have fun with them rather than to meet someone wouldn't you. So, I think they won't drink as much when they get closer to their friends*

(Female high school focus group 2)

4.4.3.2 Alcohol's role in letting go at university

Within this sub-theme, prospective students discuss the effects of alcohol in letting go. They perceived university students to use alcohol for its intoxicating effects in order to have fun on a night out, but also considered alcohol to be a relaxant utilised by students when the pressures of university intensify.

The motivation behind students' drinking was thought to be the intoxicating effects that are associated with being drunk. Across the male high school group, most participants agreed that students use alcohol to have fun and enhance a night out '*I think they just do it for fun, like it makes a night out better doesn't it*' (Mixed college focus group 4) and made implicit contrasts between students' drinking and what they referred to as a more serious form of drinking, such as drinking to forget.

P1: It's not like depressive drinking where people are drinking to forget stuff it is more about (..) it is to just about being drunk and just having fun
(Mixed college focus group 4)

Explicitly, participants referred to the role of drinking rituals, such as preloading and drinking games in reaching this intoxicated state before entering the night-time drinking environment (NTE). Several members spoke of the awkwardness and undesirability of arriving in the NTE sober and presumed students engage in drinking rituals to reach this necessary level of drunkenness.

P1: Cause you don't want to turn up sober or anything like that, it's just a bit a bit awkward being in a club with like loads of noise, you'd just be like (..) and you're not drunk then it would just be a bit, bit weird
P2: Pre-drinking and drinking games just make drinking more fun, they probably use them as a fun way to get drunk before going out
(Male high school focus group 3)

In contrast to the view that alcohol is used to have fun at university, alcohol was also viewed by others as a way to escape the pressures of university. Across some of the groups (N=3) participants agreed that alcohol would aid relaxation and act as a distraction for when the academic pressures at university build. The role of alcohol in coping with academic pressures was presumed to be more pertinent in the second and third years of university when workload intensifies.

P1: *I think in the third year you are more likely to drink to relieve stress, like it is meant to be really hard so going out drinking probably helps (laughter).*

(Female high school focus group 1)

P1: *Like if you have had a bad week it's just a good way to like release*

P2: *Second and third year it might be more like a reward so say like, you haven't been out in three weeks, so you will go out because you have been working*

(Male high school focus group 3)

4.4.4 Theme IV: Influences on pre-existing perceptions

In this final theme, the influences that have led to the development of pre-existing perceptions of a heavy student drinking culture are explored. Generally, perceptions were gained from a combination of influences, which included: the media's portrayal of students' drinking, conversations with family and friends and the individual's own experiences.

4.4.4.1 Portrayal of students' drinking in the media

Media coverage of a heavy drinking student culture was found to be the dominant narrative across the discussions. In addition, social media sites acted as a platform for older peers to share personal drinking experiences at university. Both sources of information acted to shape expectations around drinking at university.

The presentation of students' drinking in the media was found to play an important role in shaping perceptions and expectations around alcohol use at university. There was consensus at a group and individual level that media coverage frames university students as heavy drinkers. It was clear from group discussions that there are no shortage of TV programmes and news articles that make these associations. Some students directly referenced these programmes: '*There is quite a lot of TV shows though, like Sun Sex and Suspicious Parents*' (Female high school focus group 1) and '*Fresh meat*' (Female high school focus group 1). In the extract below, a group of female college students refer to the recent TV series '*Freshers*' which follows new students through the university transition process and centralises partying and getting drunk as essential to the adjustment of university life (BBC, 2015). From the media's portrayal, participants across two of the groups agreed that students' drinking was depicted negatively and tended to focus on the extremes of drinking such as '*Students drunk passed out*

on the floor,' (Male college focus group 5) rather than the positive experiences students have with alcohol.

P1: I saw a programme, of people moving to uni for the first time and it just showed them all going out drinking. It then showed others who weren't drinking just sat on their own not socialising, that's where you learn it from programmes and stuff
(Female high school focus group 1)

P1: From the news and stuff them [students] getting bladdered, that is all you hear about it to be honest so that is all you would think, that they just get bladdered
(Male college focus group 5)

It is not just the mainstream media that influenced prospective students drinking perceptions, social media was found to act as a source of information. Some participants spoke of older acquaintances at university who uploaded frequent content of their alcohol use onto social media sites. Unlike the mainstream media's negative representation of the university drinking culture, the content on social media depicted the positive outcomes of students' drinking. Here, alcohol was presented as a means of creating funny drunken stories, sharing memories and facilitating group socialising among students.

P1: Friends who have gone to uni post stuff all the time, you see things on like Facebook and Instagram and stuff and snapchat of what happens

P2: Yeh them like out all the time, having fun and with all their mates
(Male high school focus group 3)

P1: Facebook and things all social media basically, they share it on there so you kind of get a picture of it
(Female high school focus group 2)

4.4.4.2 Family and peers' experiences of drinking at university

Family members and peers were cited by a large majority of participants as a source of information that informed current perceptions around alcohol use at university.

The experiences of older peers and family members who are at or have attended university was found to be significant in influencing prospective students' drinking expectations. Many spoke of peers and family members sharing stories about their own drinking experiences at university, which reflected the

stereotypical conceptions of excessive student drinking: *'My friend goes to uni and he said he had literally just spent his first year just drinking'* (Male college focus group 6).

P1: *In the first night at uni my brother had to drink 52 units in a day [...], he didn't really explain why he did it... just that he had to (laughter) I think my dad had a bit of a nervous breakdown when he found out though*
(Female high school focus group 1)

P1: *My mate goes to uni and he goes out every night like, he said cause he does History he is only uni 2 days though so it's easy for him to go out'*
(Male college focus group 5)

Family members who had not experienced university but had developed their own understanding of students' drinking from wider cultural presentations, such as the media, were also found to act as a source of information. One female participant spoke of conversations she had had with an older family member who articulated the cultural expectations around drinking at university to her, *'Even my nan said you will be out drinking all the time when you're a student'* (Female high school focus group 1).

4.4.4.3 Own experiences reinforce the concept of a heavy student drinking culture

The information participants had obtained from the media, peers and family members around the dominance of alcohol at university was reinforced by individuals' own observations and personal experiences with alcohol and university.

Across the groups, several participants discussed pre-arrival contact that they had already made with universities. Some participants spoke of the experiences they had whilst visiting peers and family members at university and gave first-hand accounts of the cultural drinking practices that they had engaged in, such as preloading and drinking games. The experiences these participants had acted in forming positive first impressions of the university drinking culture and proceeded to shape expectations for future behaviour.

P1: *Yeh, I have stayed with my brother as well we played drinking games at their uni with like him and his friends, so yeh I kind of expect that is what I will do at uni*
(Female high school focus group 1)

P1: *I went to visit my sister [at university] and it was a decent night out like*
(Male college focus group 6)

Others described information they had received around alcohol use at university at an open day visit. Open days provide an opportunity for potential applicants to explore the campus and get a feel for student life. Part of the open day process includes a university campus tour which is led by university student representatives. One participant referenced student representatives as an influential source of information. During her visit these students shared the excessive drinking behaviours that they engaged in at university. Contrary to these experiences, males within the high school group attended an open day at a different institute where alcohol use was not referenced.

P1: *Like when I went to an open day the people that took us round were saying that they went out drinking all the time during the first year at university*
(Female high school focus group 1)

P1: *They didn't try and promote it, they don't go oh well this city is amazing for nightlife you should come and stuff so*
(Male high school focus group 3)

4.5 DISCUSSION

This study was designed to holistically explore prospective university students' perceptions of the student drinking culture before these students arrived on campus. The findings indicate that through various sources of information, new students arrive at university with pre-conceived perceptions of a heavy student drinking culture and knowledge of how alcohol can be used to assist with the adjustment to student life. Excessive drinking was recognised as a key feature of the student experience with participants anticipating that alcohol would aid new relationships and help overcome social anxiety around integration.

The findings presented help to develop a currently small literature on the social and cultural norms of drinking at university. This study highlights the significance of pre-arrival alcohol expectations and demonstrates the impact that widely held beliefs have on shaping ideology and influencing drinking behaviour.

4.5.1 Drinking is the norm

Throughout the discussions it was apparent that prospective students had developed cultural expectations around what it means to become a university student. Participants anticipated that heavy drinking would be central to the formulations of student identity and a normal aspect of university life. Prospective students perceived most undergraduates to be heavy and frequent drinkers and made explicit reference to high-risk drinking behaviours, such as preloading and drinking games, which they presumed were common among this subgroup. Perceptions of a heavy student drinking culture are demonstrated throughout the UK literature base (Davies, Law & Hennelly, 2018; Piacentini & Banister, 2006) suggesting that the portrayal of students' drinking is consistent across the country. For example, in a study conducted on students across eight universities (N=3,796), 90% of those surveyed expected there to be a heavy drinking culture at university (NUS, 2015). Within my study, the perceptions and expectations held across the groups were relatively homogenous, this lack of deviation may illustrate the strength of social norms surrounding student alcohol use in the local area.

In practice, perceptions held around the 'normal' drinking behaviours of university students consistently act as a casual factor for individual drinking. The results from my study support constructs of the social norms theory in which those who view drinking as the norm alter their behaviour, or in this case have the intention to change their behaviour in an attempt to 'fit in' with the collective student identity (Baer, Stacy & Larimer, 1991; McAlaney & McMahon, 2007; O'Connor, Martin & Martens, 2007; Perkins & Berkowitz 1986; Perkins, 2007). My findings illustrate that cultural presentations associating alcohol and students aid negative opinions of non-drinking students. The unfavourable opinions that are held by participants in this study around abstention highlight the social challenges facing non-drinking students, but are also a concern given evidence associating negative evaluations of non-drinking with increased individual alcohol levels (Regan & Morrison, 2011; Zimmermann & Sieverding, 2010). Universities have some responsibility in breaking the social norms around not drinking at university and challenging drinking expectations before young people arrive on campus. One interventional approach might be to promote the positive experiences that students have when attending non-alcohol focused events and making non-alcoholic drinks on a night out more appealing to students. Further, to

modify and reframe students' cultural expectations to drink, current university students could be recruited as mentors to incoming students. These students could provide help and guidance to new students as well as reframe norms and enhance the favourability of non-drinker prototypes (Davies, Law & Hennelly, 2018). Although this may not have the intended and desired outcome and therefore care is needed if peer to peer interventions are to be implemented.

One event which is likely to enhance the belief that alcohol is an integral part of university life is Freshers' week. For many participants within the study, the initial week of university was perceived to be a period characterised by excessive drinking and new-found freedom. For incoming students, Freshers' week is the first experience students have of university life. The normality of excessive drinking during this period is likely to confirm stereotypical conceptions and set the expectation that such behaviours are accepted and normalised on campus. Over the last decade Freshers' week has extended to Freshers' month in some UK institutions, which is suggestive of the culture of drinking in which new university students are being introduced.

4.5.2 Aspects of university perpetuates drinking

Findings from the current study show that universities themselves play a key role in setting the expectation to drink through the promotional material they send to incoming students. For example, open days and pre-admission information sent to students illustrate how alcohol is being advertised as a particular feature of the student social life at some universities. In recruiting students, universities often create the perception of a 'good student experience' by using imagery of local night-time drinking spaces in their recruitment material (Brown, 2016). Incoming students therefore arrive at university with the idea that drinking is central to the student social experience (Piacentini & Banister, 2006) which informs decisions to drink. In addition, the evidence presented here indicates that some prospective students place greater emphasis on the social aspects of university rather than the academic experience. Universities which market themselves on the nightlife of the local area are more likely to draw in students who enjoy a heavier drinking culture; which could reinforce and maintain the heavy drinking reputation of the institution. Universities must consider the way that they present the student experience

to incoming students as this has some part to play in developing expectations to drink. In order to lower drinking expectations, institutions should attempt to promote other aspects of life on campus and alternative events that do not rely upon drinking during the build up to students' university transition.

Throughout the discourse, frequent reference was made to the intensive promotions of alcohol in and around student dense areas and the limited alternatives to drinking on offer to students. Evidence indicates that heavy alcohol marketing landscapes play an influential role in maintaining the culture of heavy drinking and help to shape new students understanding around what is normal and accepted on campus (Griffin et al., 2009; Hastings & Angus, 2009; Seaman & Ikegwuonu, 2010). As others have purported it is important that student drinking is understood against the wider context of drinking in the UK, in which alcohol is readily accessible and affordable to young people (Atkinson & Sumnall, 2017; Barton & Husk, 2012; Valentine et al., 2007). It is therefore suggested that a multi-level tailored approach which aims to challenge excessive drinking across different platforms, such as student union bars, nightlife venues situated in the local community, student halls of residence and student health and wellbeing services would help to alter cultural norms around student drinking. Such concepts will be explored further in Chapter 6.

Many of the participants viewed university as a period where drinking is legal, the responsibilities and pressures that accompany adulthood are absent and parental input is minimal. This led participants to describe university as the 'perfect opportunity' to have fun and go out drinking. These findings broadly replicate those within other studies which have described the time spent at university as an extension of the transition from youth to adulthood in which students are neither an adolescent or an adult (Banister & Piacentini, 2008). Theorists argue that the position of students is ambiguous as they occupy a time between childhood and adulthood in which they experience the freedom to drink (most students are aged 18 and are therefore legally allowed to drink in the UK) and the independence of living away from parents whilst still being protected within the institutional environment (Arnett, 2004; Banister & Piacentini, 2008). This transitional period gives students permission to act in ways that may be seen to be irresponsible outside of the context of university (Banister & Piacentini, 2008).

These findings have implications on the development and implementation of alcohol interventions. The challenge for policy makers seeking to encourage behavioural change is that students are of an age where they can make their own decisions and for the first time have new found freedom to consume alcohol legally. Regulating behaviour is therefore complex, in past studies students and staff responded negatively to university policies of regulation arguing that such approaches go against students' independence and freedom to drink (Brown, 2016; Larsen et al., 2016). Encouraging students to be responsible for their own drinking behaviour through reducing risk and harm may therefore be a more appropriate response.

4.5.3 The role of alcohol at university

Considerations of the negative health and social wellbeing associations of students' drinking were not elicited from focus group discussions. Drinking was associated with sociability, relaxation and pleasure seeking which were thought to provide powerful incentives for university students to drink. In this respect, heavy drinking at university was viewed as unproblematic; such misperceptions are potentially dangerous as participants are more likely to view drinking as desirable and enter university with little regard for the negative outcomes associated with excessive drinking (Atkinson et al., 2011; Atkinson et al., 2015). This finding has implications for local and national interventions, as students' narratives in this study demonstrate the transition to university is likely to be a time in which new students with limited drinking experience experiment with alcohol and consequently experience more harms. The transitional period could be used by policy and university officials to raise awareness of alcohol-related harms in attempt to reduce the risks to new vulnerable students.

The most important aspect of student life for participants in the current study appeared to be the formation of new social networks. Such findings concur with student-based research conducted elsewhere. In a UK study including 1108 first year undergraduates, 65% of students cited the formation of new relationships as the most important factor of the student experience (UPP Student Experience Study, 2017). In my study, alcohol was prioritised by all the groups as a means of overcoming anxiety associated with forming new relationships. When individuals make the transition from home to

university, they often leave behind pre-established peer groups and family members and therefore may experience a sense of loss which necessitates the need to adopt new friendships (Brown, 2016; Wright, 2017). Whilst there are a number of conceptual lenses that could be drawn upon to make sense of alcohol's role in forming new peer networks, one way to interpret these findings is to adopt notions of Bourdieu's theoretical framework of 'capital' (Bourdieu, 1984; 1986). Bourdieu states that to succeed in a given environment requires the ability to 'fit in' with a social group (Scott et al., 2017). In order to achieve acceptance, individuals internalise and act out cultural and social norms which are associated with the field. Maintaining the idea that drinking at university is a habitual expectation and university students are supposed to drink as part of their new student role is therefore likely to influence incoming students' drinking behaviour. Bourdieu contends that in conforming to these norms, individuals feel that they will accrue high levels of social capital and peer recognition (Borsari & Carey, 2001; Perkins, 2002). Therefore, my findings suggest that there is a need to disrupt the meaning of drinking as a social practice prior to students' arrival on campus if we wish to change this behaviour. The perceived pressure to drink at university highlights that more could be done to advertise other aspects of life on campus during the weeks running up to university. Early intervention, which acknowledges alcohol's role in socialising and supports students through the transition to university may prove beneficial and take the focus away from drinking in the initial months of university (Davies, Law & Hennelly, 2018). For example, showing different ways in which students use their leisure time that involves relaxing and socialising through non-alcohol focused activities.

Lastly, participants here expected drinking at university to become less important once an established group of friends was made, because of this it is argued that the initial phase of students' university careers is a time of heightened risk for heavy drinking and associated consequences (Hallett et al., 2012; Sher & Rutledge, 2007). It may be that students' motives to drink alter as individuals progress through university. Limited research explores students' drinking across the university years, therefore a better understanding of the motives underpinning behaviour across the university life course could help to develop targeted and therefore more effective student alcohol interventions.

4.5.4 Sources of information

Several sources of information were found to play a key role in shaping the cultural norms around alcohol and its use at university. The excessive media focus on the university drinking culture is evidenced through articles and images of drunk students featured in national newspapers, which predominately focus on the negative outcomes of students' alcohol use (Nicholls, 2009). Headlines such as *'Young Brits more likely to drink heavily if they have been to UNIVERSITY'* (Daily Express, 2016) and *'A degree in drinking: Students booze for 19 hours per week... with the average session lasting SIX hours and costing £2457 a year'* (Daily Mail, 2013) along with visual images of intoxicated students shape harmful stereotypes and reproduce the norms of excessive drinking within the university environment (Atkinson et al., 2015; Nicholls, 2012). Social networking sites (SNS) were also highlighted as a source of information for new students, with university peers frequently uploading content of their university drinking experiences. A qualitative study by Griffiths & Casswell (2010) found that SNS are utilised by students to communicate their excessive drinking behaviours with others in order to gain social capital, this acts to create a 'intoxogenic digital space' where young adults learn about the positive outcomes of alcohol use and the context in which it is consumed (Griffiths et al., 2010: 528; Nicholls, 2012).

The depiction of students' drinking across the media and on SNS would benefit from future research. Findings from the current study demonstrate that media content which reinforces associations between alcohol and the student experience helps to shape cultural expectations of drinking at university. This therefore presents challenges for public health officials wishing to alter the norms around drinking. The representation of the student drinking culture identified in this research suggests that engagement with media outlets to encourage the promotion of clear, evidence-based messages regarding students' alcohol use may have some impact in altering the norms around drinking at university. Although challenging, creating consistent health messaging and promoting factually accurate depictions of students' alcohol use in the media and across SNS is likely to lower the expectations around alcohol and its use at university (Atkinson et al., 2015).

My findings echo those of others (Brown, 2016), which found drinking stories and information given to students prior to university from peers and siblings reinforce expectations of university life and drinking. The idea of older students passing down drinking stories and rituals to incoming university students gives evidence of the tradition of drinking which exists at university (NIAA, 2015). The pre-conceived perceptions participants had gained from mass media and family and peers' personal accounts were then confirmed through direct experiences with the university drinking environment, such as visiting university peers and observations of university students' alcohol use in the night time environment.

4.6 STRENGTHS, LIMITATIONS AND REFLECTIONS

This study involves local engagement with prospective university students to gather insight into context specific perceptions and expectancies of the local student drinking culture. This research is among the first of its kind to explore young people's perceptions of the university drinking culture prior to their arrival on campus, therefore one of the major strengths of the research is the new insight it brings to the field. Through gaining insight into the local presentation of students drinking it is anticipated that findings will be utilised locally to help inform and develop alcohol strategies, which can be applied to students' drinking in Liverpool (see Chapter 7 for intervention points).

A further strength of this research was the multiplicity of views explored. The unstructured nature of the focus groups yielded a wide range of knowledge and perceptions of the university drinking culture. Group members built upon their peers' dialogue but also challenged individuals when they disagreed with discussion points which elicited rich and diverse data. There is however a possibility of peer influence when conducting focus groups with peer friendship groups (Peterson & Barron, 2007). Conforming to members within the group could have led to findings that portray a relatively homogenous view towards the student drinking culture. To reduce the impacts of peer influence I encouraged quieter members to talk by directing questions and using their names in order to try and produce results that were reflective of the entire group.

One of the main methodological issues found when implementing the study was the recruitment of local schools and colleges. Schools are inundated with academic research invitations and the varying examination periods and school holidays meant that there was limited time to undertake the research. As a result, the sample of schools was smaller than anticipated and recruitment took longer than initially planned. However, data saturation was reached after five focus groups suggesting that the small sample of schools had little effect on the results.

During focus group moderation I encountered several challenges. I struggled to elicit knowledge from the mixed sex group and had to facilitate this group more. Throughout the discussion participants gave short, non-descript answers and discussion was sometimes fragmented. This may account for study participants' lack of knowledge around alcohol use at university however it was clear that individuals among the group felt uncomfortable talking in front of each other and therefore their reluctance to talk was likely to relate to the pressure and influence of their peers. Several techniques were utilised to try and overcome these challenges, for example, the inclusion of stimulus material and directed questions which in most cases appeared to reduce participants' initial apprehension and encouraged group discussion, however there was limited dialogue from this group. Although discourse flowed more freely within the single sexed groups, members within the female only groups often talked over each other which made it difficult to comprehend what was being said; as I was new to this method, it was difficult to manage the more dominant characters. Lastly, the focus group questions were inclusive of prospective students who abstained from alcohol however, it was noted that those students who did not drink were often disengaged or seldom shared their opinion. On reflection, if the study were to be repeated, several changes would be made. Firstly, I would use single sex groups only, the groups would comprise five to six members as opposed to some of the larger groups who had eight participants and effort would be made to include more non-drinking students.

Despite the limitations, this study is among the first of its kind to explore the development of young adults' perceptions of students' drinking prior to them arriving at university. Understanding students' conceptions of alcohol use at university may be significant in understanding the embedded norms of

drinking at university and could arguably create opportunities to challenge, re-frame and modify beliefs at a crucial developmental time-point.

4.7 CONCLUSION

The findings of this study have created a comprehensive picture of how prospective students conceptualise the use of alcohol at university and what students expect to gain from drinking when they arrive at university. This study highlights the significance of pre-arrival alcohol expectations and demonstrate the impact that widely held beliefs have on shaping ideology and influencing drinking behaviour. As past research has shown once heavy drinking norms become established, they become difficult to challenge (Livingstone, Young & Manstead, 2011). Breaking down these norms present real challenges for those trying to contest excessive drinking in universities, therefore, early intervention which challenges, re-frames and modifies beliefs at this developmental time-point are crucial if universities want to create a moderate student drinking culture.

4.8 STUDY HIGHLIGHTS

- Prior to university arrival, excessive drinking is recognised as a key feature of the student experience with participants anticipating that alcohol would aid new relationships and help overcome social anxiety around integration.
- Cultural presentations of the student drinker identity can create negative connotations of those students who transgress from the norms of drinking at university. Unfavourable opinions of non-drinking students highlight the social challenges facing non-drinking students and how peer scrutiny relating to non-drinking could manifest.
- Prospective students presumed that universities themselves play a key role in creating and maintaining a heavy student drinking culture.
- Wider cultural norms, peers, family members and personal experiences were all identified as important sources which acted to create harmful stereotypes and reinforce associations between alcohol and sociability.

CHAPTER 5: THE TRANSITION TO UNIVERSITY: A CROSS SECTIONAL STUDY EXPLORING THE PREVALENCE AND FACTORS ASSOCIATED WITH ALCOHOL USE AMONG UK UNIVERSITY STUDENTS- STUDY II

5.1 INTRODUCTION

In this chapter I present the results from a survey exploring 221 first year university halls of residence students' drinking behaviours before and during the transition to university. This study aimed to further explore gaps in the research concerning drinking perceptions, the role of alcohol and related harms during the transition period. Whilst there is some published research in the UK on university students' consumption patterns, drinking across the transition from home to university has generally been overlooked within UK student literature. From a health promotion perspective, it is first important to understand the trajectory of drinking upon entry into university as there is evidence to suggest that drinking habits developed during this critical period are maintained throughout the subsequent university years (Bewick et al., 2008a; Riordan, Scarf & Conner, 2015). It was anticipated that through investigating and gaining a better understanding of first year students' experiences with alcohol during the move to university would help to inform the development of future alcohol interventions by identifying new insights for policy makers and developers.

5.2 AIMS AND RESEARCH QUESTIONS

This study aimed to explore the perceptions and prevalence of drinking as well as alcohol related harms experienced by first year halls of residence students during the move from home to university.

The research questions are:

1. What are the perceptions and drinking behaviours of students transitioning to university?
2. Are students' pre-existing perceptions of the university drinking culture associated with students' drinking experiences?
3. Are students' drinking behaviours before and during the transition to university related to health and wellbeing?

5.3 MATERIALS AND METHODS

5.3.1 Sampling strategy

The study adopted a convenience sampling approach for both stages of the sampling process. For the initial stage of recruitment, eleven first year student halls of residence representatives who were employed by the SU were recruited to disseminate questionnaires to all first year LJMU halls of residence students. Utilising the relationships already made with key contacts within the SU¹³, specifically the Community Engagement Manager, I was granted access to this group of students with the anticipation that key findings would help to inform and develop local SU alcohol strategies. The rationale for using this sampling method was fourfold.

First, as the study attempted to understand students' trajectory of drinking and experiences with alcohol across the transition from the family home to university it was considered important to focus on the subgroup who had most recently shared this experience. Research indicates that students who leave home to attend university undergo several difficult tasks including separation, social network demands and acquisition of independent living skills, all of which have the potential to impact on drinking behaviour (Borsari, Murphy & Barnett, 2007; Maggs & Schulenberg, 2005; LaBrie, Lamb & Pederson, 2009). It was therefore determined that those who had moved away from home into university residence would be the target population for the current study.

Second, in the past, large web-based surveys of random samples of undergraduates have been used to quantify the prevalence of alcohol use in student populations. These large surveys typically recruit study participants through subject lectures or mailers sent through the universities internal system (El Ansari, Sebena & Stock, 2013; Gardner et al., 2012; Gill et al., 2007; Heather et al., 2011; John & Alwyn, 2014). During study development I had considered utilising an online survey method as this approach would have reached a wider more diverse study population and reduced the time spent distributing questionnaires. However, as those students who are experiencing problems adjusting to university life or are consuming alcohol excessively are unlikely to be engaging in university activities, obtaining

¹³ I had been working closely with the SU as part of the NUS Alcohol Impact Scheme.

participants through university lectures or mailers would not have been an appropriate method to reach this hidden subgroup. Subsequently, I decided to adopt a direct recruitment strategy which targeted first year university student hall accommodation residents through a face-face approach to ensure that I gained access to this critical population.

Third, this direct recruitment approach also relies on social network bonds for compliance. The stigma around the use of alcohol is well documented and, in most societies, there is a large shortfall between aggregated questionnaire and sales data. For example, within the UK, retrospective analysis reports a discrepancy of 430 million units a week which is unaccounted for between survey and tax sales data (Bellis et al., 2009). Student hall representatives are well-connected members of the student community, their role is to support and engage with fellow students settling into life at university. This sampling approach has also been used previously to shift the power base of the research process from the researcher to the 'objects' of research (Burns & Schubotz, 2009) as it utilises peers to gather data and therefore is more likely to put participants at ease to share common drinking experiences and disclose more accurate information than they would have with an academic researcher (Kirby, 1999; Lushey & Munro, 2014; Moore et al., 2011). Through minimising power imbalance, researcher bias is reduced, and the quality of data is enhanced.

Lastly, due to the limited research available on students' drinking across the transitional period the survey was used as an exploratory method to measure a number of key aspects related to the research problem. This meant that the survey itself included a diverse and large set of questionnaire items which were too large to be conducted through online methods. Face-to-face data collection methods rely on personal interaction to encourage recruitment and have in the past accounted for greater responses when using large survey items than traditional methods such as telephone and online surveys (Bowling, 2005). With this in mind, I anticipated that a face-to-face recruitment approach would ensure full completion of the survey and boost response rates.

5.3.2 Design and procedure

The survey was piloted amongst postgraduate students (N=11) at LJMU to highlight pitfalls in the questions being asked and identify instruments which may be inappropriate or incomprehensible (Van Teijlingen & Hundey, 2002). Pilot participants did not express feeling uncomfortable answering any of the questionnaire measures, however several items were refined to ensure their appropriateness for the target population (Bryman, 2008). For example, the definition of preloading and binge drinking were revised and later written in lay terms.

Following ethical approval (LJMU Research Ethics Committee: 15/EHC/058) data collection ran during term one, from November to December 2016 (excluding examination periods). To ensure that student hall representatives did not feel coerced or obliged to participate, details were provided regarding the study process and the choice was given to opt out of the research. Those who participated (9 in total) gave written consent. Once recruited, student hall representatives attended a compulsory training presentation where key information regarding the studies' aim, methodology, practicalities, sample representativeness and ethical understanding were imparted. During this session student hall representatives were informed that only first time, first year undergraduates who attended LJMU and resided in halls of residence were eligible to participate. Student hall representatives were asked to deliver the survey to all flats and student social areas within their assigned accommodation. I anticipated that through this data collection method all first year halls of residence students that attended the case university would be approached.

Once trained, student hall representatives disseminated the questionnaire to first year undergraduates who resided in each of the university halls of residence they represented. If participants expressed an interest in taking part, they were provided with an information sheet which explained that consent would be implied through survey completion. Participant information sheets also briefed students on the study's aims, objectives and data confidentiality, participants were then left to complete the questionnaire alone and at a time convenient to them. Participants were asked to place their completed survey in the blank envelope provided to maintain confidentiality. Once completed student hall

representatives collected survey responses. In the first two weeks of recruitment activity a meeting was held with student hall representatives as initial responses were low (N=82). As the aim of the study was to measure the trajectory of students' drinking across the transition from home to university it was critical that data was collected within the month. Therefore, as an incentive a £10 spending voucher was offered to student hall representatives who collected the most responses.

The survey comprised 45 questions, covering participants demographics, pre-arrival drinking perceptions, university drinking experiences, drinking behaviours and experiences of health and wellbeing. Students were asked to reflect on their behaviour prior to arrival, as well as respond to questions about their current behaviours at university. The survey was created based on the findings from the baseline NUS analyses (NUS, 2014) (Chapter 3) which highlighted heavy student engagement in at home drinking practices, such as preloading and drinking games. The questionnaire was further informed from an extensive review of literature and incorporated key theoretical concepts that have been discussed previously (Chapter 2). As this is one of the first UK studies to measure alcohol use across the transition from home to university, the survey was exploratory and therefore included a diverse and large set of questionnaire items.

5.3.3 Measures

Following piloting, the final questionnaire (Appendix 10) included the following measures.

Demographics

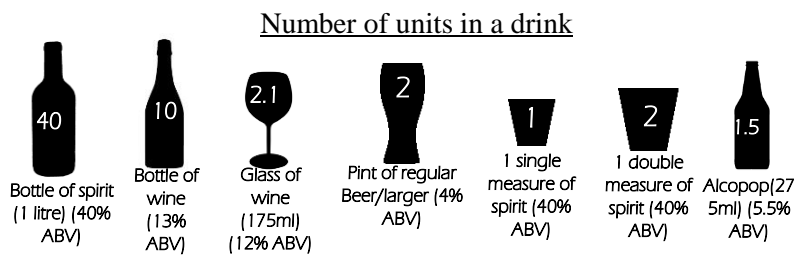
Demographic items reported respondents' gender, age, ethnicity, and country of origin. Respondents were also asked questions relating to their residential status, location and occupation prior to arriving at university (Table 5). These questions were included to assess relationships between socio-demographic factors and drinking behaviour upon entry to university.

Perceptions of university students' drinking

Perceptions of the student drinking culture were assessed using an adapted version of the college life alcohol salience scale designed by Osberg and colleagues (2010), which has been used previously to assess American College students' beliefs about the centrality of alcohol at university. Pre- and post-arrival drinking perceptions were assessed by asking respondents to identify the extent to which they agreed with twelve perception statements using a four-point Likert scale (strongly agree, slightly agree, slightly disagree, strongly disagree). Due to small numbers in many categories, variables were recoded to a two-category response, those who agreed (strongly agree/ slightly agree) and those who disagreed (strongly disagree/ slightly disagree):

Perceptions of the student drinking culture	A) Thinking about <i>before you moved to university</i> , to what extent did you agree/ disagree with the following statements describing the university experience?				B) <i>Since moving to university in September</i> , to what extent do you now agree/ disagree with the following statements describing the university experience?			
	Strongly agree	Slightly agree	Slightly disagree	Strongly disagree	Strongly agree	Slightly agree	Slightly disagree	Strongly disagree
It is easier for students that drink alcohol to make friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The reward at the end of a hard week of studying at university should be a weekend of heavy drinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that students who do not go out drinking are not enjoying their university experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Missing a class due to a hangover is part of being a university student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a one night stand after an alcohol fuelled night is an accepted behaviour at university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking excessively is an important part of university life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students who drink the most are often seen as the most cool	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking alcohol is a something that every university student partakes in	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University is a time for experimentation with alcohol	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking is something students' feel like they're expected to do at university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking at home before going out is a normal part of university life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I start university I will go out drinking alcohol a lot more than I do currently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Descriptive norms (Chapter 2) were assessed using items derived from the Drinking Norms Rating Form (Baer, Stacy & Larimer, 1991), an instrument used in student populations to measure individuals' perceptions of normative drinking behaviour (McAlaney & McMahon, 2007). Participants were asked at both pre- and post- arrival reference points 'how much' (during a night out) and 'how often' a typical university student drinks alcohol. To ensure comprehension, the question was prefaced with a unit calculator.



NHS, 2016

Pre-arrival descriptive norms

Q26: Since *starting university in September*, how many *units of alcohol* do you think the following people consume on a *typical night out*? (please use the unit calculator above).

A 'typical university student'

Q27: Since *starting university in September*, how often do you think the following people drink alcohol?

	A 'typical university student'
Daily/ almost daily	<input type="radio"/>
4/5 days a week	<input type="radio"/>
2/3 days a week	<input type="radio"/>
Once a week	<input type="radio"/>
1-3 times a month	<input type="radio"/>
Less than once a month	<input type="radio"/>

At university descriptive norms

Q34: Thinking about *before you moved to university* how many units of alcohol did you think the following people consumed on a *typical night out*? (please use the unit calculator above)

A 'typical university student'

Q35: Thinking about *before you moved to university*, how often did you think the following people drank

	A 'typical university student'
Daily/ almost daily	<input type="radio"/>
4/5 days a week	<input type="radio"/>
2/3 days a week	<input type="radio"/>
Once a week	<input type="radio"/>
1-3 times a month	<input type="radio"/>
Less than once a month	<input type="radio"/>

To garner insight into how much individuals perceive others drink in comparison to their own personal consumption levels students were asked:

Q28: Compared to a 'typical university student' do you think that you drink?

More
 The same
 Less
 Don't know
 I do not drink

Experiences of university drinking

Students were asked a series of questions relating to their experiences with alcohol at university. To my knowledge there are no existing measures to assess drinking experiences therefore bespoke non-validated items were used for this part of the questionnaire. Drinking experiences were assessed by asking respondents to identify the extent to which they agreed with seven drinking statements using a five-point Likert scale, ranging from 'strongly agree' to 'strongly disagree'. Due to small numbers in many categories, variables were recoded into a two-category response, those who agreed (strongly agree/ slightly agree) and those who disagreed (strongly disagree/ slightly disagree). Two students who selected 'neither agree/disagree' were recoded as missing data for this survey item.

University drinking experiences

Q21: To what extent do you agree or disagree with the following statements?

Since starting university:	Strongly agree	Slightly agree	Neither agree/disagree	Slightly disagree	Strongly disagree
My overall alcohol consumption has increased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking alcohol has been at the centre of socialising	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt some pressure to make new friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My university friends often share drinking stories with each other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to feel like I am missing out if I decide not to go out drinking with my university friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My university friends and I often laugh about how drunk we were	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My university friends often make me stay out drinking for longer than I had planned to go out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In relation to drinking experiences, respondents were asked whether they believed alcohol to be a problem amongst the student population (0= 'No', 1= 'Yes', or 2= 'I don't know'):

<p>Q20: Do you believe alcohol consumption to be a problem amongst university students?</p> <p><input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Don't know</p>

Alcohol use prior to and at university

Respondents indicated whether they had ever used alcohol. For those responding 'yes', information about alcohol consumption was collected for three distinct reference points *a.) A typical week prior to university, b.) Freshers' period* and *c.) A typical university week.*

Drinking frequency:

1. Freshers' week

Respondents were asked to report how often they consumed alcohol during Freshers' period, which ran from the 19th to the 30th of September. Drinkers responded to a categorical variable with 7 response options:

<p>Q17: Thinking about the fresher's period the <i>first 11 days of university</i> (Saturday 19th– Wednesday 30th of Sep) how many days did you consume alcohol ?</p> <p><input type="radio"/> Every day <input type="radio"/> 9-10 days <input type="radio"/> 7-8 days <input type="radio"/> 5-6 days <input type="radio"/> 3-4 days <input type="radio"/> 1-2 days <input type="radio"/> I did not consume alcohol</p>

2. Drinking frequency pre-and post- arrival

Those who drank were asked to report how often they drank prior to and at university using a six- and seven-point Likert scale:

Prior to university

Q40: How often did you drink alcohol?

Daily/ almost daily 4-5 days a week 2-3 days a week Once a week 1-3 times a month Less than once a month Never

At university

Q11: In the last university term how often have you drank alcohol?

Daily/ almost daily 4-5 days a week 2-3 days a week Once a week 1-3 times a month Less than once a month

3. Binge drinking frequency pre-and post- arrival

To assess for binge drinking frequency, those who drank were asked to report how often they consumed 6 or more drinks containing alcohol in one single drinking session both prior to and at university using a 7-point Likert scale:

Prior to university

Q41: How often did you have 6 or more drinks containing alcohol in a single session?

Daily/ almost daily 4-5 days a week 2-3 days a week Once a week 1-3 times a month Less than once a month Never

At university

Q12: Since the start of university, how often do you have 6 or more drinks containing alcohol in a single session?

Daily/ almost daily 4-5 days a week 2-3 days a week Once a week 1-3 times a month Less than once a month Never

Drinking type and quantity

For the assessment of drinking type and quantity, respondents were shown images of thirteen different alcoholic beverage types (ABV volume and glass size) and were asked to identify how many of each drink type they consumed at the three distinct reference points with “zero” a valid response. For drinkers only, reported alcoholic beverages were then converted into standard UK units (1 unit = 8 g or 10 ml of pure alcohol) using published figures for alcohol content (e.g. single measure of spirits = 1 unit; bottle of lager = 1.5 units; standard glass of wine = 2 units [NHS, 2016]) and each individual’s median unit total for each drinking period was then calculated. These data were used to categorise respondents into Low-level drinkers (<13.99 units) Moderate-level drinkers (>14 and <20.99 units), High-level drinkers

(>21 and <35.99 units) and Very High-level drinkers (>36 units). These values reflect new alcohol guidelines set by the Department of Health which stipulate that neither men or women should drink in excess of 14 units of alcohol over a seven-day period (Department of Health, 2016). Further, alcoholic drinks were categorised into beer, wine, spirits, premixed and other to explore beverage preference.

Change in drinking variable

To explore changes in consumption upon entry to university a new variable was constructed from questionnaire items:

Individual median unit change variable- ‘Total pre-university weekly units consumed’ minus ‘Total at university weekly units consumed’.

Drinking practices

All those that had consumed alcohol were also asked a series of questions to identify how often they engaged in specific drinking practices at both pre and at university reference points, including: *preloading; intentionally drinking to get drunk; deliberately not eating prior to a night of drinking; drinking different alcoholic beverage types in one night; purchasing multiple drinks because they are on offer; and participating in drinking games*. Responses were assessed in relation to overall drinking frequency by using a five-point Likert-type response format, ranging from (0) ‘never’ to (5) ‘every time I drink’. Responses were coded to denote regular (every time/most of the time) or non-regular engagement (some of the time/never) of each drinking practice:

Q43: During the two months before you moved to university please tell us how often you did the following?

	Every time I drank	Most of the time I drank	Some of the time I drank	Never	Don't know
Start drinking in your/friend's house before you went out for the night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deliberately got drunk at home before a night out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deliberately did not eat before going out so that you could get more drunk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drink alcohol with the intention of getting drunk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mixed different alcoholic beverages in one night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bought multiple drinks because they were on offer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Took part in a drinking game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Prior to university

Q19: Since the start of university, please tell us how often you do each of the following:

	Every time I drink	Most of the time I drink	Some of the time I drink	Never	Don't know
Start drinking alcohol in your/ friend's house before you go out for the night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deliberately get drunk at home before a night out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deliberately do not eat before going out so that you can get more drunk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drink with the intention of getting drunk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mix different alcoholic beverages in one night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bought multiple drinks because they were on offer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Took part in a drinking game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

An additional means of exploring students' drinking behaviour during the transition to university was garnered through asking drinkers the length of time they spent drinking on a typical night out prior to and at university. Four items were used to assess length of time spent drinking:

Prior to university

Q42: Thinking about a 'typical night out' during the two months before university, when you consumed 6 or more alcoholic drinks in a single session, please answer the following:

42a.) What time would you start drinking alcohol?
 AM/PM

42b.) What time would you arrive at the nightlife environment (bar/ nightclub)?
 AM/PM

42c.) What time would you stop drinking alcohol?
 AM/PM

42d.) What time would you leave the nightlife environment (bar/nightclub)?
 AM/PM

At university

Q13: Thinking about a 'typical night out' at university, where you consume 6 or more alcoholic drinks in a single session, please answer the following

13a.) What time do you start drinking alcohol?
 AM/PM

13b.) What time do you arrive at the nightlife environment (bar/ nightclub)?
 AM/PM

13c.) What time do you stop drinking alcohol?
 AM/PM

13d.) What time do you leave the nightlife environment (bar/nightclub)?
 AM/PM

Health and wellbeing

To measure students' health and wellbeing across the university transition, students were asked how often they had experienced seven negative wellbeing outcomes since entering university. All survey responses to health and wellbeing items were made on a five-point Likert-type scale. For the purposes of analysis, responses were recoded to denote regular (some/ most /all of the time) or non-regular experiences (rarely/never) of health and wellbeing outcomes:

Q22: Since <i>you started university</i> how often have you felt the following?	All of the time	Most of the time	Some of the time	Rarely	Never
I have felt lonely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt homesick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt stressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt depressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt overwhelmed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt nervous/ shy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt self-conscious	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Alcohol-related harm

The extent to which students had experienced problems as a consequence of drinking at university were assessed using a 16-item modified version of the alcohol-related harm measure utilised in the NUS national student survey (NUS, 2015; Chapter 3). Respondents used a 4-point response format to indicate whether they had experienced each harm more, the same, less or not experienced when compared to pre-arrival drinking harms.

To explore the proportion of students who had experienced each alcohol-related consequence at university, responses were then coded dichotomously into 0= 'Not experienced' (Not experienced=0) and 1= 'Experienced' (Experienced more=1; Experience the same= 2; Experienced less= 3) at university:

Q24: Please tell us whether you have experienced the following things more or less *since you started university*, compared to *before you started university* as a result of drinking alcohol?

	Experienced more	Experienced the same	Experienced less	Not Experienced
Was unable to remember what happened the night before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Woke up feeling embarrassed about things you had done	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vomited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Did something which put you in a risky situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regretted a decision to engage in sexual activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Been a victim of crime	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taken recreational drugs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Had unprotected sex	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt you had spoiled someone's night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Injured yourself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smoked cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Were refused entry to a club due to being too drunk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Caused damage to the place where you live	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Got involved in a fight or heated argument	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Passed out or fainted suddenly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Missed a class/ lecture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5.3.4 Data analysis

Due to the lack of knowledge and published data available on students' drinking across the transition from home to university, the current study takes an exploratory approach to analysing the data and therefore did not power the study to test any specific hypothesis.

For purposes of analyses, sample characteristics were categorised dichotomously owing to the small number of respondents in each demographic group. These included; ethnicity: white or BME (mixed Asian, Black, Chinese, other ethnic group); location type: city (inner city, outer city) or rural (town, village); and occupation: in education (at college, sixth form) or out of education (working full/part time, apprenticeship, gap year).

Descriptive statistics were used to quantify perceptions and prevalence of drinking at both pre and at university reference points and give insight into the health and wellbeing of students during the transition into university. Statistics utilised Chi Squared and Mann Whitney U tests for bivariate explorations by sample characteristics.

To explore changes in drinking behaviour upon entry to university, data were analysed on students who reported non-missing data for alcohol consumption at both pre and at university reference points. Alcohol unit intake was assessed for normality using Shapiro-Wilk tests (histograms included in

Appendix 11), as the data were positively skewed median values and non-parametric tests were used throughout. Evaluation of changes in drinking behaviour and median unit total, prior to and at university, were conducted using McNemar tests^b or Marginal Homogeneity Tests^c and Wilcoxon tests, respectively.

Backward Conditional Logistic regression analysis was carried out to identify which characteristics were independently associated with health and wellbeing and alcohol-related harms during the transition to university. Owing to the small number of respondents consuming moderate levels of alcohol I recategorised low-level drinkers (<13.99 units) with moderate-level drinkers (>14 and <20.99 units) to create a low-moderate drinking category. This was used for the purposes of logistic regression analysis only. Data were analysed using IBM SPSS version 21.

5.4 RESULTS

5.4.1 Sample characteristics

A total of 231 first year students across nine halls of residence took part (8.4% of first year students residing in the selected halls [N=2,738] in 2016/2017). Of these, 10 stated they were aged seventeen at the point of pre-university recall and were therefore under the legal age for purchasing alcohol in the UK. These students were removed from the study as I felt that their consumption behaviour may differ from those who were legally allowed to drink. This left a final sample of 221 participants.

Over half (57%) of all respondents were female, which is in line with the sex distribution of first year undergraduates in 2015/2016 at LJMU (Male, 53%; Female 47%). The majority of the respondents were white (74%) and stated that the UK was their country of origin (89%) (Table 5). The ethnic profile of the sample did reflect the broader first year undergraduate population at the case university in 2015/2016, in which 89% of the population were white and the majorities (94%) country of origin was the UK (Higher Education Statistics Agency (HESA), 2016).

Table 5. Sample characteristics

Characteristic		Total N=221 n(%)	Missing data N	LJMU 2015/16 cohort N(%)
Gender	Male	92(43)	7	4075(53)
	Female	122(57)		3540(47)
Age (years)	18-21	205(93)	1	5465(72)
	21-35	15(7)		2,150(38)
Ethnicity	White	157(74)	10	6350(89)
	Black minority	54(26)		805(11)
Country of origin	UK	164(89)	36	7155(94)
	Out of UK	21(11)		465(6)
<i>Prior to university</i>				
Occupation	In education	178(81)	4	
	Out of education	39(19)		
Location of residence	City	97(47)	13	
	Rural	111(53)		
Living arrangements	With parents	190(88)	5	
	With friends	26(12)		

5.4.2 Pre-arrival perceptions

A large proportion of the sample arrived at university with perceptions of a heavy student drinking culture. For example, of the entire sample (Table 6) three-fifths (58%) presumed that all university students consume alcohol and a similar proportion (64%) agreed that drinking was an expected student behaviour. Prior to arriving at university three quarters (74%) of all students assumed that alcohol would aid the formation of new peer relationships and when asked whether they had expected their own drinking behaviours to change, 62% anticipated that they would drink more often at university.

Table 6 demonstrates that prior to university respondents tended to perceive typical university students as heavy drinkers (estimated unit median unit total, 25.0 units), who drank on a frequent basis. For example, the highest proportion (37%) of respondents presumed that a 'typical university student' drank two to three days a week. No significant differences were observed in pre-arrival perceptions by gender (data not displayed).

Table 6. Respondents pre-arrival perceptions of the student drinking culture and ‘typical student’ drinking behaviours

Perception statements	<i>Agree N(%)</i>	<i>Disagree N(%)</i>	<i>Missing data N</i>
It is easier for students that drink alcohol to make friends	156(74)	56(26)	9
The reward of a hard week of studying is a weekend of heavy drinking	103(49)	108(51)	10
Students who don’t go out drinking are not enjoying themselves	82(39)	127(61)	12
Missing a class due to a hangover is part of being a student	102(48)	110(52)	9
One-night stand is accepted at university	112(53)	100(47)	9
Students who drink are seen as the most cool	87(43)	117(57)	17
Drinking excessively is important part of being a student	82(32)	118(68)	23
Every university student drinks alcohol	120(58)	88(42)	13
University is a time for experimentation with alcohol	126(60)	83(40)	12
Drinking is something students feel they are expected to do	130(64)	72(36)	19
Preloading is a normal part of university life	147(70)	64(30)	10
When I start university, I will go out drinking more	130(62)	81(38)	10
Perception of median unit consumption^a		25.0	31
Perception of frequency of drinking			
Less than once a month		3(2)	25
1-3 times a month		5(3)	
Once a week		13(6)	
2/3 days a week		73(37)	
4/5 days a week		64(33)	
Daily/almost daily		38(19)	

Note. Of all student participants (N=221)

^aOn a typical night out at university

5.4.3 Pre-established perceptions compared to at university drinking experiences

In comparison to pre-arrival, respondents agreed/strongly agreed with more of the perception statements at university. The percentage of respondents who agreed that '*students who do not go out drinking at university are not enjoying themselves*' increased from 39% prior to university to 48% when at university ($p<0.001$), similarly, the perception that *missing a class due to a hangover is part of the student experience* rose from 47% to 62% ($p<0.001$) upon arrival (Table 7).

In addition, respondents' perceptions of typical students' consumption behaviours increased in magnitude upon arriving at university. In comparison to pre-arrival, respondents perceived '*typical university students*' as heavier drinkers (increase from 26 units pre-arrival to 30 units at university; $p<0.001$) after time on campus. By contrast, there was no statistically significant differences for perceived frequency of drinking (Table 8).

Respondents were asked to compare their own personal consumption levels with perceived levels of typical students' drinking. That the largest majority (42%) of students presumed that they drank less than a '*typical university student*', a smaller proportion (36%) of students believed that they drank at similar levels to other students and two fifths (22%) presumed that they drank more than others.

Table 7. Comparisons in respondents' perceptions of the student drinking culture prior to and at university

	Pre-arrival ^a N(%)			At university ^a N(%)		
	<i>N</i>	<i>Agree</i>	<i>Disagree</i>	<i>Agree</i>	<i>Disagree</i>	P-value _b
It is easier for students that drink alcohol to make friends	196	144(74)	52(26)	162(83)	34(17)	0.009
The reward of a hard week of studying is a weekend of heavy drinking	196	92(47)	104(53)	118(60)	78(40)	<0.001
Students who don't go out drinking are not enjoying themselves	192	75(39)	117(61)	92(48)	100(52)	0.008
Missing a class due to a hangover is part of being a student	195	92(47)	103(53)	120(62)	75(38)	<0.001
A one- night stand is accepted at university	196	100(51)	96(49)	116(59)	80(41)	0.008
Students who drink are seen as the most cool	190	81(43)	109(57)	85(45)	105(55)	0.537
Drinking excessively is important part of being a student	192	66(30)	126(60)	96(68)	96(32)	0.002
Every university student drinks alcohol	191	112(59)	79(41)	110(58)	81(42)	0.860
University is a time for experimentation with alcohol	194	116(60)	78(40)	130(67)	64(33)	0.008
Drinking is something students feel they are expected to do	188	122(65)	66(35)	127(68)	61(32)	0.522
Preloading is a normal part of university life	196	137(70)	59(30)	159(81)	37(19)	<0.001

^aOf those that had non-missing data for both pre-arrival and at university perception data

^bSignificance (p) values represent a comparison in pre and at university drinking perceptions and were obtained using Wilcoxon Signed Rank Test

Table 8. Perceptions of ‘typical student’ drinking behaviours prior to and at university

		Pre-arrival ^a	At university ^a	P-value
Perception of median unit consumption ^b		26.0	30.0	<0.001 ^c
Perception of frequency of drinking N(%)	Less than once a month	3(2)	3(2)	
	1-3 times a month	5(3)	2(1)	
	Once a week	13(6)	10(5)	
	2/3 days a week	72(38)	83(44)	
	4/5 days a week	62(33)	51(26)	
	Daily/almost daily	35(18)	41(22)	0.420 ^d

^a Of those that had non-missing data for both pre and at university survey perception data, N=190

^b On a typical night out at university

Significance (p) values represent a comparison in pre and at university drinking perceptions and were obtained using Wilcoxon Signed Rank Test^c and Marginal Homogeneity Tests^d

5.4.4 University drinking experiences

Upon arriving at university, drinking appeared to be central to socialising for a large proportion of the sample (62%) with a similar proportion (61%) of drinkers agreeing that alcohol had aided new peer relationships.

Nearly half of all respondents reported experiencing some form of pressure to drink at university. For example, 44% felt that their university peers expected them to drink and a slightly higher proportion (57%) felt like they miss out socially if they do not attend a night of drinking. Chi squared tests revealed that no significant differences in drinking experiences was reported by gender (data not displayed).

Finally, respondents were asked whether they perceived alcohol to be a problem at LJMU. Of all students with non-missing data (N=174), four tenths (43%) held the belief that alcohol use is not a problem among LJMU students, a much lower proportion (27%) believed alcohol use to be a problem among students and 31% stated that they were not sure.

Table 9. Respondents' experiences of drinking at university

	<i>Agree</i> <i>N(%)</i>	<i>Neither</i> <i>agree/disagree</i> <i>N(%)</i>	<i>Disagree</i> <i>N(%)</i>	<i>Missing</i> <i>data</i>
Drinking experience statements				
My overall alcohol consumption has increased at university	145(67)	24(11)	49(22)	3
My university friends laugh at how drunk we were ^a	158(83)	21(13)	7(4)	2
My university friends share drinking stories the day after drinking	161(75)	39(18)	16(7)	5
Alcohol is at the centre of social occasions	136(62)	40(18)	42(20)	3
Drinking alcohol has made making friends easier ^a	116(61)	44(28)	19(11)	9
My university friends make me stay out drinking longer ^a	92(50)	51(27)	43(23)	2
I have felt my university friends expect me to drink	97(44)	63(29)	59(27)	2
The people I mix with now drink more than those in my home town	103(47)	66(30)	49(23)	3
I feel I miss out socially if I don't go out drinking	124(57)	40(18)	55(25)	2

Note. Of all university students (N=221)

^aOf those that drank at university only (N=188)

5.4.5 Alcohol use prior to and at university

5.4.5.1 *Drinking levels*

Of the students surveyed, 177 respondents stated that they drank prior to arriving at university amounting to 82% of the total sample (N=217, missing data N=4). Of the 140 drinkers with non-missing data, the total median number of units consumed during a typical week prior to university was 16 units. Of those drinkers who reported pre-university consumption levels the highest proportion (48%) drank at low levels, followed by very high (21%), moderate (16%) and high levels (15%)¹⁴ levels (see Figure 5). Overall, 52% of drinkers exceeded current low-level drinking thresholds set by the Department of Health in 2016 (consuming over 14 units of alcohol over a seven-day period for both males and females).

In total, 171 students drank during the 11-day Fresher's event. The median intake of alcohol consumed by drinkers during Fresher's period was 63 units.

In the first term of university, 188 respondents (85%; N=220, missing data =1) stated that they drank. For the 165 students with non-missing data on weekly consumption, the median number of units consumed during a typical university week was 30 units. Of those drinkers who reported university consumption levels the highest proportion (38%) of students drank at very high levels, followed by low (35%), high (20%) and medium (6%) levels (see Figure 5)¹⁴. Overall, 64% of drinkers exceeded the low-level threshold (consuming over 14 units of alcohol over a seven-day period for both males and females).

Differences in consumption levels by demographic characteristics were observed across the three alcohol measures. Mann Whitney analyses revealed that male respondents drank at significantly higher levels than their female counterparts across all three of the drinking reference points ($p < 0.01$) (Table 10). For those who were UK residents, consumption levels were significantly greater at both prior to ($p = 0.04$) and at university ($p = 0.04$) reference points when compared to Non-UK residents. In addition,

¹⁴ Low-level drinkers (<13.99 units); Moderate-level drinkers (>14 and <20.99 units); High-level drinkers (>21 and <35.99 units) and Very High-level drinkers (>36 units) (Department of Health, 2016).

those who stated that they were enrolled in full-time education prior to university consumed significantly higher levels of alcohol once arriving at university than their peers who were out of education ($p=0.02$) (Table 10).

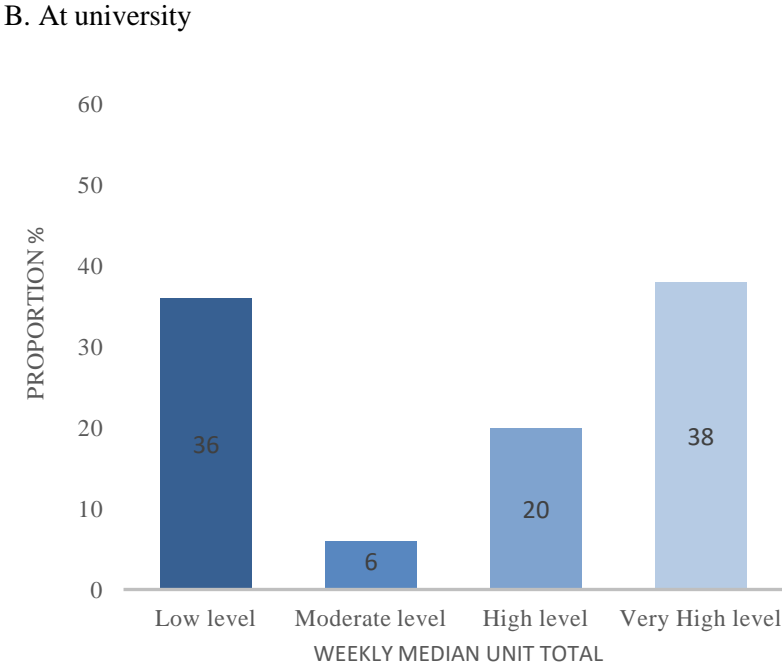
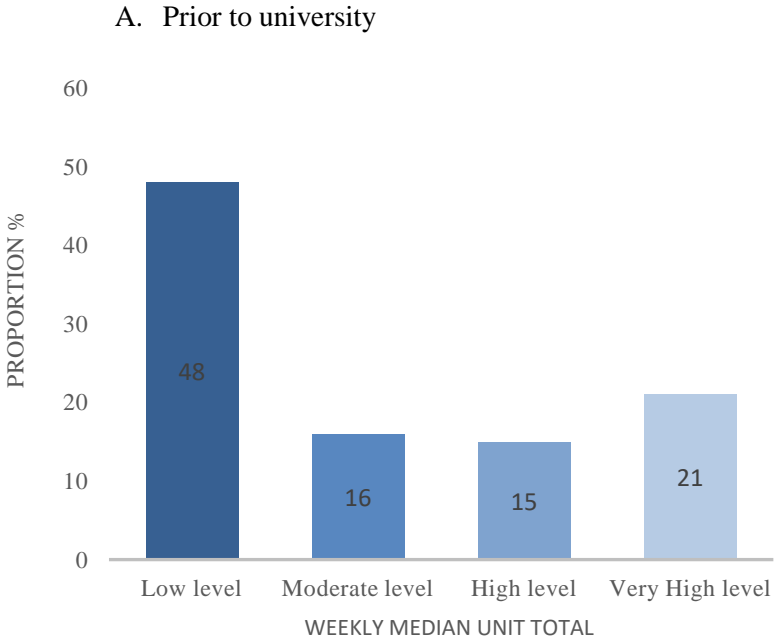
Table 10. Total median alcohol units consumed by drinkers during a typical week prior to university, during freshers' period and in a typical week in the first term of university, by sample characteristics

Characteristic		Median alcohol consumption								
		Prior to university ^a			Freshers' week ^a			At university ^a		
		Units	N ^c	P ^b	Units	N ^d	P ^b	Units	N ^e	P ^b
All		16	140		63	171		30	165	
Gender	Male	18	66		89	91		35	88	
	Female	13	74	0.004	55	77	<0.001	24	74	0.01
Ethnicity	White	16	110		63	135		31	128	
	BME	12	26	0.136	55	28	0.428	17	29	0.267
Country	UK	16	111		76	137		31	133	
	Not in the UK	5	9	0.044	30	8	0.078	12	8	0.047
<i>Prior to university demographics</i>										
Occupation	In Education	15	115		76	141		32	136	
	Out of education	17	25	0.646	49	28	0.043	17	27	0.021
Location	City	14	62		77	72		30	70	
	Rural	17	68	0.290	58	89	0.238	31	83	0.988
Living with	Parents	15	123		73	151		31	145	
	Friends/ on own	33	15	0.077	48	17	0.400	26	16	0.921

^a Of those who consumed alcohol at the reference point and had non-missing data. Missing data (N^c=37; N^d=0, N^e=23)

^b Significance values represent a comparison in median unit values across demographic groups and were obtained using Mann Whitney-U tests

Figure 5. Drinker classifications¹⁴ prior to and at university



5.4.5.2 *Drinking frequency*

In terms of drinking frequency, prior to university (N=177) the largest proportion (34%) of those that drank consumed alcohol one to three times a month, followed by a similar proportion (30%) who consumed alcohol once weekly (Table 11). Of those who drank during freshers' period (N=171), the highest proportion of drinkers (25%) drank on 7 or 8 of the nights. A similar proportion of drinkers drank every night (20%), 9 to 10 nights (18%) and 5 to 6 nights (18%) of the event. Around a tenth drank on 3 to 4 nights (11%) or up to 1 to 2 of the nights (9%). During the first term of university, the highest proportion (45%) of those that drank (N=188) consumed alcohol two to three times during the week, fewer students (23%) drank once a week, with few students drinking one to three times a month (13%).

Chi squared analysis revealed that at university, male students drank more frequently than their female counterparts (Table 11). No significant differences were observed in drinking frequency across the three reference points by any other demographics (Data not displayed).

5.4.5.3 *Beverage preference*

Prior to university the most popular beverage of choice was spirits (54%) followed by beer (45%). A similar pattern unfolded at university, with those that drink consuming more spirits (85%) and beer (57%) than any other beverage (Table 11).

5.4.5.4 *Drinking practice engagement*

The majority of drinkers reported engaging in a number of risky drinking practices either most or every time they drank alcohol. At university 88% of drinkers preloaded, 70% drank with the intent to get drunk, 69% mixed different alcoholic beverages, 72% purchased discounted larger measures of alcohol and 51% took part in drinking games (see Table 11 for pre-university drinking behaviours).

At university, females preloaded significantly more than their male counterparts (males, 82%; females, 92% $p=0.04$). No other significant differences were found in drinking practice engagement, by gender (Table 11).

Table 11. Proportion of drinkers engaging in drinking behaviours at both pre and at university reference points

		Prior to university ^a n (%)				p ^b	At university ^a n (%)				p ^b
		Male N=76	Female N=98	All N=177	Missing data		Male N=82	Female N=103	All N=188	Missing data	
Drinking Frequency	Less than once a month	7(9)	20(21)	27(15)	0	0.115	1(1)	7(7)	8(4)	0	0.048
	1-3 times a month	22(29)	34(35)	57(34)			13(16)	12(12)	25(13)		
	Once a week	25(33)	28(28)	54(30)			15(18)	29(27)	44(23)		
	2-3 times a week	17(22)	12(12)	29(17)			38(47)	44(43)	82(45)		
	4-5 times a week	5(7)	3(3)	8(5)			11(13)	11(11)	23(12)		
	Daily	0(0)	1(1)	2(1)			4(5)	0(0)	6(3)		
Binge drinking frequency^c	Never	5(6)	12(12)	17(10)	0	0.094	2(2)	6(6)	8(4)	0	0.011
	Less than once a month	8(11)	23(24)	31(17)			5(6)	10(10)	15(8)		
	1-3 times a month	23(30)	30(31)	53(30)			14(17)	15(15)	29(15)		
	Once a week	19(27)	20(20)	40(23)			14(17)	36(35)	50(27)		
	2-3 times a week	17(23)	11(11)	30(17)			38(47)	27(25)	66(35)		
	4-5 times a week	2(3)	1(1)	4(2)			6(7)	9(9)	15(8)		
	Daily	0(0)	1(1)	2(1)			3(4)	0(0)	5(3)		
Beverage preference	Beer	49(65)	27(28)	79(45)		<0.001	59(72)	32(31)	107(57)		<0.001
	Wine	8(11)	37(38)	47(27)		<0.001	11(13)	51(50)	66(35)		<0.001
	Spirits	44(58)	51(52)	96(54)		0.442	62(76)	70(68)	160(85)		0.253
	Premixed	16(21)	22(22)	40(23)		0.825	20(24)	29(28)	62(33)		0.564
Drinking practice^d	Preloading	50(68)	66(68)	117(67)	3	0.948	67(82)	91(92)	161(88)	4	0.040
	Drinking to get drunk	47(63)	53(55)	103(59)	2	0.290	62(77)	64(63)	129(70)	3	0.056
	Deliberately not eat prior to drinking	24(33)	29(31)	54(32)	8	0.816	18(23)	32(33)	53(30)	9	0.113
	Mixing of alcoholic drinks	55(74)	62(64)	119(68)	3	0.147	62(76)	65(65)	129(69)	3	0.121
	Purchasing discounted larger measures of alcohol	47(64)	54(57)	103(60)	6	0.322	55(69)	70(73)	128(72)	9	0.544
	Drinking game	36(49)	35(37)	72(42)	4	0.110	39(48)	52(52)	94(51)	4	0.606

Note. Sample includes those who drank at either reference point and had non-missing alcohol consumption data

^a Of those who consumed alcohol at the reference point

^b Significance values represent comparisons in engagement in drinking behaviours between sample characteristics, obtained using X² tests

^c Binge drinking defined as consuming > 6 units for males and > 8 units for females in one drinking session

^d Data reports only on those who regularly engaged in each drinking behaviour

5.4.5.5 *Changes in student drinking behaviour*

From this point on, all analyses comparing pre and post university drinking behaviours are based on those who had data available at both time points, leaving a total sample of 143 (see definition in section 5.3.5).

5.4.5.6 *Changes in drinking frequencies and quantities across the transition to university*

Both male and female drinkers reported a significant increase in their drinking frequency during the first term of university compared to prior to ($X^2(2)$, $p < 0.001$) (Figure 9). Similarly, amongst drinkers' binge drinking frequency also escalated upon entry into university ($X^2(2)$, $p < 0.001$) (Table 13).

Drinking quantity increased significantly ($p < 0.001$), with both male and female drinkers' 'typical weekly' median unit total increasing from 15.9 units prior to university (males, 18.6 units; females, 12.5 units: $p = 0.003$) to 31.4 units whilst at university (males, 35.5 units; females, 25.5 units: $p = 0.01$) (Table 12; Figure 8). Of those that drank at both reference points, 27% ($N = 40$) decreased their total weekly unit consumption, 3% ($N = 4$) made no change to their consumption levels and 7 out of 10 students (70%) ($N = 99$) increased their drinking levels after entering university. Of those that increased their weekly unit intake 28% ($N = 40$) increased their unit total by 1-15 units, nearly one fifth (17%) of drinkers ($N = 24$) consumed 15 to 30 units more than pre-arrival and 25% of the sample ($N = 35$) increased their unit total by over 30 units.

Figures 6 and 7 are suggestive of a "polarization" of consumption at university. Prior to arrival, the highest proportion (50%) of drinkers drank at low levels, with the remaining drinkers consuming alcohol evenly across moderate (16%), high (14%) and very high levels (20%). Contrastingly, at university, the highest proportion (39%) of students drank at very high levels, followed by low (33%), high (22%) and medium (6%) levels (see Figure 6¹⁴) indicating that at university very high-level drinkers are consuming alcohol alongside low-level drinkers.

Figure 6. Changes in drinking classification upon entry to university¹⁴

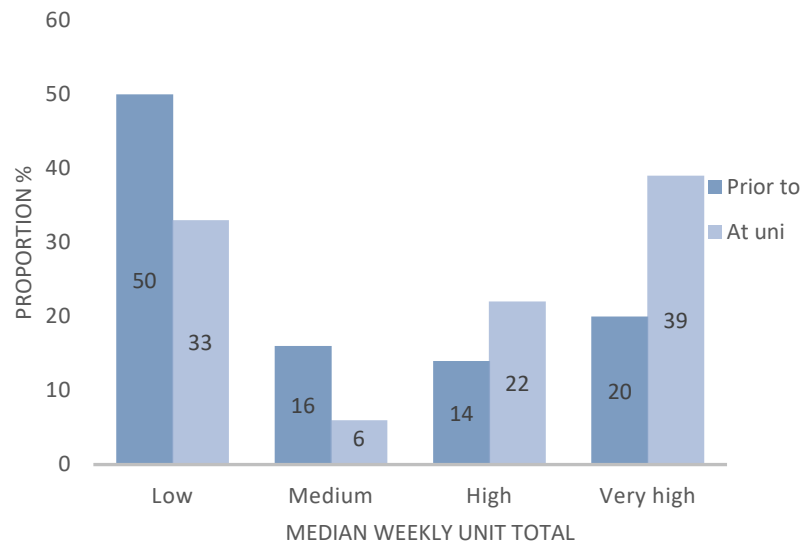


Table 12. Total median alcohol units consumed by paired sample drinkers during a typical week prior to and during the first term of university, by sample characteristics

Characteristic		Median alcohol consumption				
		Prior to university ^a		At university ^a		P ^b
		Units	N	Units	N	
All		15.9	134	31.4	141	<0.001
Gender	Male	18.6	62	35.5	65	<0.001
	Female	12.5	69	25.5	73	<0.001
Ethnicity	White	16.0	103	31.7	110	<0.001
	BME	12.0	25	17.0	25	0.036
Country	UK	15.9	106	31.6	113	<0.001
	Not in the UK	4.6	7	12.3	6	0.600
<i>Prior to university demographics</i>						
Occupation	In Education	15.7	108	33.1	115	<0.001
	Out of Education	17.0	24	21.7	24	0.301
Location	City	13.9	58	23.5	61	<0.001
	Rural	17.9	64	33.7	68	<0.001
Living with	Parents	15.1	116	31.4	123	<0.001
	Friends/ on own	32.7	14	28.9	14	0.221

Note. Paired sample includes those who drank and had non-missing alcohol consumption data at both reference points

In total there were nine non-drinkers prior to university who initiated drinking at university and two non-drinkers at university, who consumed alcohol prior to university

^a Of those who consumed alcohol at the reference point

^b Significance values represent comparisons in weekly drinking levels prior to and during the first term of university, obtained using Wilcoxon Signed Rank Test

Figure 7. Median alcohol units consumed during a typical week prior to and during the first term of university, by gender

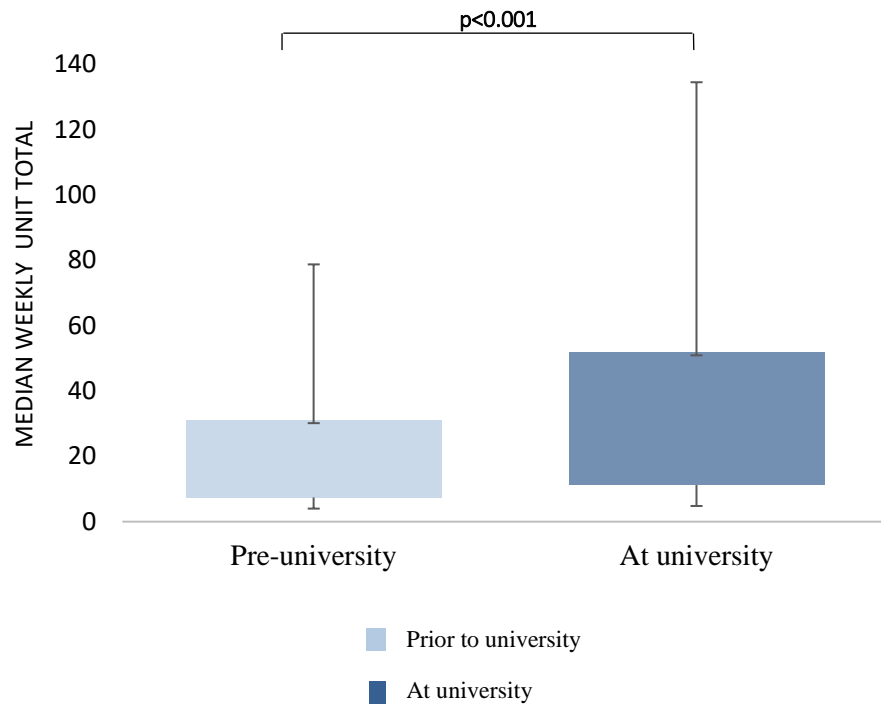


Figure 8. Median alcohol units consumed during a typical week prior to and during the first term of university

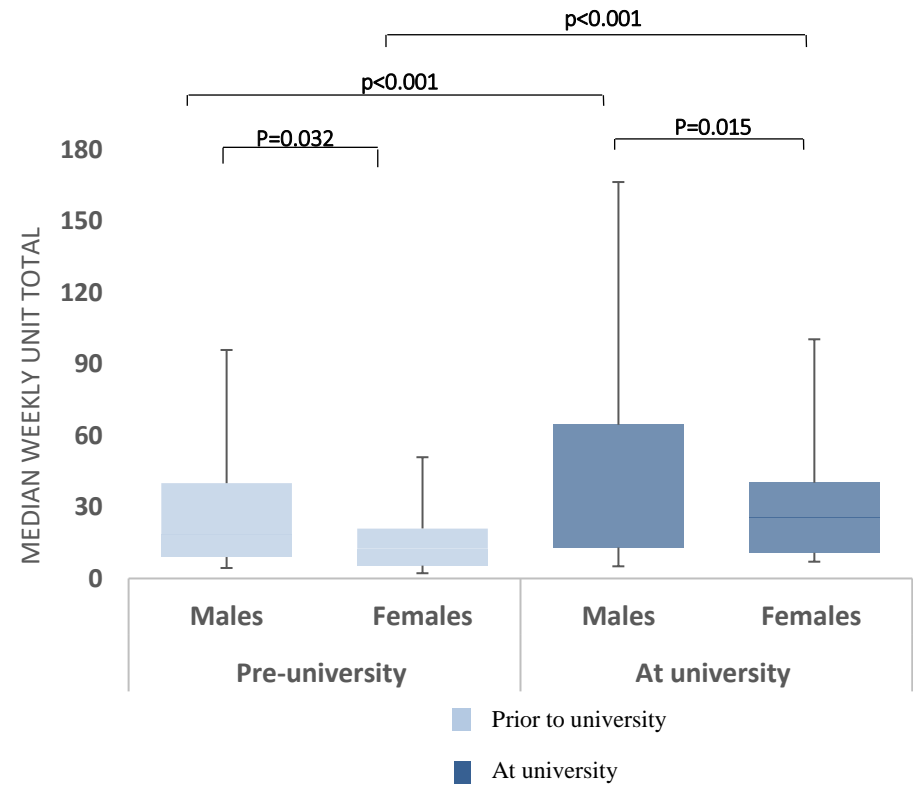


Figure 9. Frequency of weekly drinking and binge drinking among paired sample drinkers before and during the first university term, by gender

Figure 9.1 Drinking behaviour prior to university, by gender

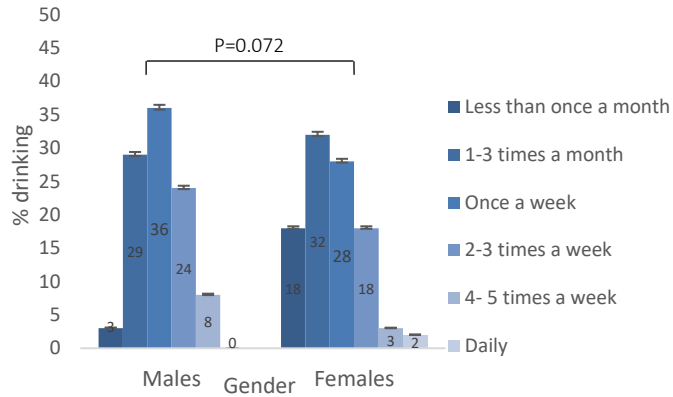


Figure 9.2 Drinking behaviour during the first term of university, by gender

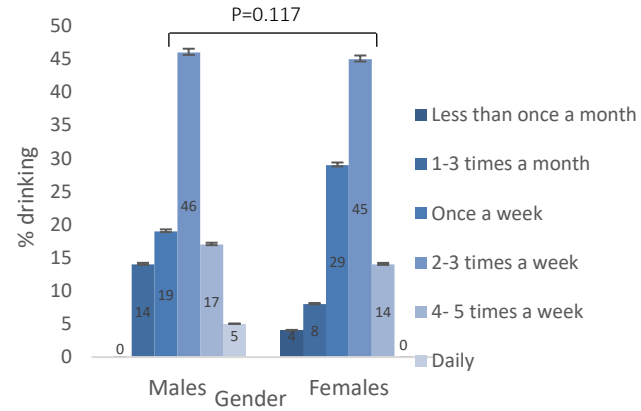


Figure 9.3 Binge drinking behaviour prior to university, by gender

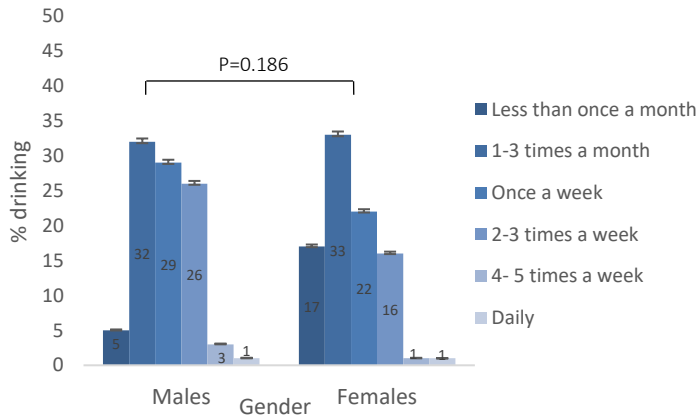
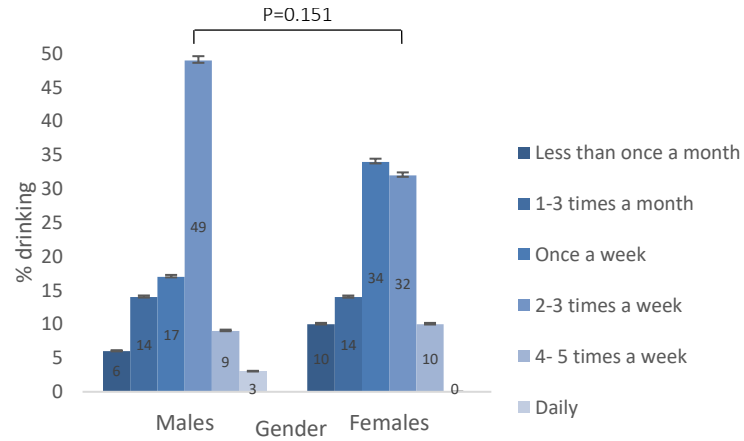


Figure 9.4 Binge drinking behaviour during the first term of university, by gender



Significance (p) values were obtained using chi squared tests and represent a comparison in frequency of weekly drinking between males and females

5.4.5.7 *Changes in beverage type across the transition to university*

Spirits were found to be the most commonly consumed beverage at both reference points, however, a significantly larger proportion of drinkers consumed spirits at university (83%) then prior to (68%; $p < 0.001$). Similar patterns were also observed for wine consumption (prior to, 34%; at university, 42%; $p = 0.011$) (Table 13).

5.4.5.8 *Changes in drinking practice engagement across the transition to university*

Increased rates of engagement upon entry to university were observed in preloading (prior to, 70%; at university, 89%; $p < 0.001$), drinking with the intent to get drunk (prior to, 64%; at university 75%; $p < 0.001$) and drinking game participation (prior to, 44%; at university, 54%; $p < 0.05$). Female drinkers were found to significantly increase their rates of engagement upon entry to university in three out of the five drinking behaviours, compared to male drinkers who increased engagement in only one of the measured drinking behaviours (Table 13).

Overall, the average (median) length of time spent drinking during a typical night out at both time points was six hours. Notable differences were observed in the length of time students spent preloading. Prior to university, students preloaded between the hours of 20:00 and 22:00, which was significantly different to at university where preloading occurred between the hours of 21:00 and 00:00 ($p < 0.001$), suggesting students enter nightlife drinking spaces much later at university.

Table 13. Proportion of the paired sample engaging in drinking behaviours prior to and during the first term of university

		Prior to university ^a n (%)			At university ^a n (%)			Male p ^b	Female p ^b	All p ^b
		Male N=62	Female N=69	All N=134	Male N=65	Female N=73	All N=141			
Drinking Frequency	Less than once a month	2(3)	12(18)	14(11)	0(0)	3(4)	3(2)	<0.001	<0.001	<0.001
	1-3 times a month	18(29)	22(32)	41(30)	9(14)	6(8)	15(10)			
	Once a week	22(36)	19(28)	42(31)	12(19)	21(29)	33(23)			
	2- 3times a week	15(24)	12(18)	27(20)	30(46)	33(45)	63(45)			
	4-5 times a week	5(8)	2(3)	8(6)	11(17)	10(14)	22(16)			
	Daily	0(0)	1(2)	2(2)	3(5)	0(0)	5(4)			
Binge drinking Frequency^c	Never	3(5)	6(9)	9(7)	1(2)	1(1)	2(1)	<0.001	<0.001	<0.001
	Less than once a month	3(5)	12(17)	15(11)	4(6)	7(10)	11(8)			
	1-3 times a month	20(32)	23(33)	43(32)	9(14)	10(14)	19(14)			
	Once a week	18(29)	15(22)	33(25)	11(17)	25(34)	36(26)			
	2-3 times a week	16(26)	11(16)	28(21)	32(49)	23(32)	56(40)			
	4-5 times a week	2(3)	1(1)	4(3)	6(9)	7(10)	13(9)			
Beverage type	Daily	1(1)	1(1)	2(2)	2(3)	0(0)	4(3)			
	Beer	49(79)	25(36)	77(58)	52(80)	27(37)	82(58)	0.508	0.774	0.383
	Wine	8(13)	35(51)	45(34)	11(17)	45(62)	59(42)	0.453	0.031	0.011
	Spirits	43(69)	47(68)	91(68)	56(86)	58(80)	117(83)	0.002	0.013	<0.001
	Premixed	16(26)	21(30)	39(29)	19(29)	25(34)	46(33)	0.607	0.481	0.310
Drinking practices^d	Preloading	43(72)	48(70)	92(70)	54(83)	66(93)	123(89)	0.070	0.00	<0.001
	Drinking to get drunk	41(67)	41(59)	85(64)	51(80)	51(70)	105(75)	0.021	0.021	<0.001
	Mixing of alcoholic drinks	46(77)	45(65)	93(71)	52(80)	49(68)	103(74)	0.815	0.481	0.471
	Purchasing discounted larger measures of alcohol	40(68)	42(61)	84(64)	44(70)	52(77)	99(74)	1.000	0.052	0.082
	Drinking game	31(52)	26(38)	58(44)	32(50)	39(55)	74(54)	1.000	0.021	0.050

Note. Paired sample includes those who drank at either reference point and had non-missing alcohol consumption data

^aOf those who consumed alcohol at the reference point

^bSignificance values represent comparisons in drinking behaviour engagement prior to and during the first term of university and were obtained using McNemar tests or Marginal Homogeneity Tests

^cBinge drinking defined as consuming > 6 units for males and > 8 units for females in one drinking session

^dData reports only those who regularly engaged in each drinking behaviour

5.4.6 Health and well-being

Among all students, 96% had experienced at least one negative health and wellbeing outcome in the first term of university. Looking more closely at students' experiences, the most prevalent negative health and wellbeing outcomes¹⁵ were the feelings of self-conscious (56%), loneliness (58%), stress (60%) and being overwhelmed (61%). In bivariate analyses, alcohol consumption levels at university, gender and personal individual unit change were significantly associated with negative outcome exposures (Table 14).

Logistic regression was performed to identify factors independently related to the negative health and wellbeing outcomes experienced at university (age, gender, weekly unit increase, drinking prior to and at university; Table 15). Here, the odds of feeling stressed (AOR= 2.8, 95% CI: 0.4-6.7) and nervous (AOR=3.1, 95% CI:0.3-8.3) in the first term of university were significantly higher for those who drank at very high levels at university. Equally, the odds of experiencing homesickness (AOR=1.34, 95% CI: 0.09-14.6) increased for each weekly unit increase (from pre to at university reference points). Further, female students were more likely to report negative wellbeing outcomes than their male counterparts (Table 14).

¹⁵ Note that these figures are of those who experienced the outcome (some, most or all of the time).

Table 14. Bivariate analysis for health and wellbeing outcomes experienced during the transition to university

		Lonely (N=216)		Homesick (N=215)		Stressed (N=217)		Depressed (N=217)		Overwhelmed (N=214)		Nervous (N=214)		Self-conscious (N=215)	
		N(%)	P ^a	N(%)	P ^a	N(%)	P ^a	N(%)	P ^a	N(%)	P ^a	N(%)	P ^a	N(%)	P ^a
Drinking pre-university	Low/Med	71(71)		62(73)		72(71)		62(74)		76(71)		54(21)		63(67)	
	High	13(13)		11(13)		14(14)		10(12)		12(11)		15(17)		12(13)	
	Very high	15(15)	0.856	12(12)	0.85	16(16)	0.662	12(14)	0.931	18(17)	0.822	18(62)	0.04	19(20)	0.149
Drinking at university	Low/Med	58(54)		39(43)		53(48)		50(58)		66(57)		46(46)		47(44)	
	High	20(19)		17(19)		16(14)		13(15)		16(14)		17(17)		18(17)	
	Very High	30(28)	0.342	34(38)	0.05	42(38)	0.08	24(28)	0.394	33(29)	0.219	37(37)	0.11	40(38)	0.05
Gender	Male	41(46)		37(37)		47(38)		32(34)		46(37)		46(59)		44(38)	
	Female	78(65)	0.006	63(63)	0.10	76(62)	0.146	61(66)	0.037	78(63)	0.036	66(41)	0.635	73(62)	0.120
Age (years)	18-21 years	115(93)		99(95)		121(95)		97(99)		123(95)		107(94)		112(94)	
	21+	9(7)	0.850	5(5)	0.22	6(5)	0.125	1(1)	0.002	6(5)	0.09	7(6)	0.800	7(6)	0.47
	Total	125(58)		110(51)		128(60)		99(45)		130(61)		115(54)		120(56)	
Individual Unit Change^b		4.9	0.869	16.2	0.00	8.3	0.012	2.5	0.002	1.8	0.295	9.3	0.01	10.3	0.00

^a Significance (p) values represent comparisons in negative wellbeing outcomes between sample characteristics and drinking behaviour, obtained using X² tests

^b Values represent the median unit change in those who experienced the negative wellbeing outcome. Significance values represent comparisons in negative wellbeing outcomes by individual unit changes, obtained using Mann-Whitney-U tests

Data reports on only those who experienced health and wellbeing outcomes some, most or all of the time

Table 15. Logistic regression for health and wellbeing outcomes experienced during the transition to university (Dependent variable: Never/rarely/some = 0, Most/all= 1)

	Lonely (N=159)			Homesick (N=158)			Self-conscious (N=157)			Nervous (N=158)			Overwhelmed (N=156)			Depressed (N=159)			Stressed (N 217)		
	AOR	95%CI	P	AOR	95%CI	P	AOR	95%CI	P	AOR	95%CI	P	AOR	95%CI	P	AOR	95%CI	P	AOR	95%CI	P
Individual Unit Change	-	-	NS	1.03	0.09-14.6	0.00	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS
Drinking pre-uni																					
High	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS
Very high	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS
Drinking at uni																					
High	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS
Very high	-	-	NS	-	-	NS	-	-	NS	3.13	0.3-8.3	0.04	-	-	NS	-	-	NS	2.8	0.4-6.7	0.01
Gender																					
Female	2.0	0.35-4.65	0.03	-	-	NS	-	-	NS	-	-	NS	-	-	NS	2.14	0.4-5.8	0.01	-	-	NS
Age																					
21+ years	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS	-	-	NS

Note. Reference categories for each variable are; drinking at uni (low/med), drinking pre uni (low/med), gender (male), age (18-21years)

Statistics utilise a stepwise backward conditional logistic regression analysis with variables that are not significant ($P = 0.05$) being removed from the model and subsequently the model recalculated

Such factors are identified with 'NS'

AOR = adjusted odds ratio

5.4.7 Alcohol-related harms

Of participants who reported drinking at both reference points (N=173), 95% had experienced at least one of the measured alcohol-related harms at university. Among these students the most experienced alcohol-related harm was memory loss (85%), followed by vomiting (82%) and missing a class lecture (79%) (Table 16).

Of those who were in education prior to university nearly 7 out of 10 (68%) missed a class more in the first university term than prior to. Approximately half of the student drinkers took more sexual risk at university than prior to, for example 49% had more unprotected sex and 51% regretted sexual activity more often (Table 16). Equally, of those who smoked cigarettes or took recreational drugs when drinking almost half did so more at university than prior to (46%, 41% respectively).

Bivariate analysis displayed in Table 17 illustrates that being male, consuming higher quantities of alcohol prior to and at university and changes in weekly unit intake upon entry into university were significantly associated with a range of alcohol-related harms.

In adjusted analyses, the odds of experiencing alcohol-related harm were significantly greater for those who drank at high and very high levels at university (Table 18). For example, very high-level consumers were 4.2 times more likely to engage in something risky when drinking (AOR=4.25, 95% CI: 0.42-11.4), 7.5 times more likely to have unprotected sex (AOR=7.5, 95% CI: 0.44-20.6), and 4.5 times more likely to have been involved in a fight (AOR=4.5, 95% CI: 0.4-14.3). Likewise, with every unit increase (from pre to at university reference points) one was more likely to pass out (AOR=1.01, 95% CI: 0.0-4.04) and vomit (AOR=1.04, 95% CI: 0.99-1.09). Drinking levels prior to university also acted as a predictor of alcohol-related harms experienced in the first university term. Students who drank at high and very high levels pre-university were more likely to use drugs recreationally (AOR=2.52, 95% CI: 0.59-2.46) and smoke cigarettes (AOR=2.20, 95% CI: 0.69-4.84) than students who drank at low to moderate levels. Consuming very high levels of alcohol pre-university also increased the odds of causing damage to student accommodation (AOR=4.35, 95% CI: 0.5-7.8). Finally, students were significantly less likely to vomit (AOR=0.4, 95% CI: 1.3-5.4) at university if they drank at very high levels pre-university.

Table 16. Drinkers' experiences of alcohol-related harm prior to and at university

	Experienced N(%)				Not Experienced N(%)	Missing data
	Experienced less	Experienced the same	Experienced more	Total		
Memory loss	15(10)	634(42)	73(48)	152(85)	28(15)	8
Woke up feeling embarrassed	23(17)	65(47)	49(36)	137(77)	41(23)	10
Vomited	38(27)	56(40)	45(32)	150(82)	32(18)	6
Did something risky	26(23)	52(46)	35(31)	113(66)	59(34)	16
Regretted sexual activity	22(25)	26(30)	41(46)	89(50)	88(50)	11
Been a victim of crime	18(35)	18(35)	15(29)	51(29)	124(71)	13
Taken recreational drugs	18(21)	34(39)	35(41)	88(50)	88(50)	12
Had unprotected sex	15(17)	35(39)	39(44)	89(51)	87(49)	12
Felt you had spoiled someone's night	22(29)	31(40)	22(29)	75(43)	98(57)	15
Injured yourself	23(22)	46(45)	34(33)	103(59)	72(41)	13
Smoked cigarettes	18(16)	41(37)	51(46)	110(60)	70(40)	8
Caused damage to where you live	20(32)	20(32)	22(36)	62(35)	115(65)	11
Got involved in a fight /argument	17(22)	35(44)	27(34)	79(45)	97(55)	12
Passed out or fainted suddenly	12(21)	25(44)	20(35)	57(32)	121(68)	10
Missed a class/lecture	14(10)	37(26)	92(64)	143(79)	38(21)	7

Note. Dependent variable: 0= 'Not experienced' (Not experienced=0) and 1= 'Experienced' (Experienced more=1; Experience the same= 2; Experienced less =3) at university

Table 17. Bivariate analysis for alcohol related harms experienced at university (Dependent variable: 0= 'Not experienced' (Not experienced=0) and 1= 'Experienced' (Experienced more=1; Experience the same= 2; Experienced less =3)

		Embarrassed	Did something risky	Regretted Sexual activity	Victim of crime	Drug use	Unprotected sex	Spoilt someone's night	Injured self	Smoked cigarettes	Damaged accommodation	Got into a fight	Passed out	Missed a class	Blanked out after a night out	Vomited
	N(%)															
Drinking pre university ^a	Low/Med	79(68)	58(62)	48(61)	21(50)	38(52)	45(43)	35(60)	51(60)	50(57)	31(60)	37(58)	31(63)	75(63)	82(66)	79(65)
	Medium	15(13)	13(14)	11(14)	7(17)	15(21)	15(19)	9(16)	12(14)	18(21)	6(12)	10(16)	5(10)	17(14)	17(14)	17(14)
	High	23(20)	23(24)	20(25)*	14(33)**	20(27)**	20(25)*	14(24)	22(26)*	20(23)**	15(29)*	17(27)*	13(27)	26(22)	24(20)	26(21)*
Drinking at university ^a	Low/Med	50(40)	37(37)	30(38)	12(28)	22(29)	25(31)	21(33)	31(34)	33(35)	15(27)	20(30)	17(35)	49(39)	55(41)	53(40)
	High	28(22)	20(20)	12(15)	8(19)	16(21)	14(17)	12(19)	19(21)	22(23)	12(22)	11(16)	9(18)	25(20)	24(18)	28(21)
	Very high	74(38)*	43(43)*	37(47)*	23(54)*	38(50)**	42(52)**	31(48)*	41(45)*	42(42)*	28(51)**	36(54)**	23(47)	53(41)	56(42)*	51(39)
Gender	Male	56(41)	53(48)	43(50)	24(50)	46(54)	42(49)	29(40)	45(45)	45(42)	28(48)	39(51)	29(54)	62(44)	64(43)	67(46)
	Female	81(58)	57(52)	43(50)*	24(50)	39(46)**	44(51)	43(60)	55(55)	62(58)	31(53)	37(49)*	25(46)	78(56)	85(57)	80(54)
Age (years)	18-21 years	133(95)	109(93)	85(93)	51(98)	87(97)	86(95)	75(96)	103(97)	105(95)	62(97)	79(96)	58(98)*	137(94)	149(96)	144(95)
	21+	7(5)	8(7)	6(7)	1(2)	3(3)	5(6)	3(4)	3(3)*	5(5)	2(3)	3(4)	1(2)	9(6)	6(4)	8(5)
Total		137(77)	113(66)	89(50)	51(29)	88(50)	89(51)	75(43)	103(59)	70(39)	62(35)	79(45)	57(32)	143(79)	152(84)	150(82)
Individual unit change^b		9.8	10.4	8.00	12.1	11.7	10.9	12.6	12.1*	11.6	13.9*	16.7*	11.1	10.4	10.2	10.0

Data reports on only those who experienced alcohol-related harm at university

*Significance (p) values represent comparisons in alcohol-related harms between sample characteristics and drinking behaviour, obtained using X² tests

^a Of those who consumed alcohol at the reference point

^b Values represent the median unit change in those who experienced the negative wellbeing outcome. Significance values represent comparisons in alcohol-related harms by individual unit change, obtained using Mann-Whitney-U tests

Table 18. Logistic regression for alcohol related harms experienced at university (dependent variable: Not experienced = 0, Experienced= 1)

	Embarrassed (N=128)		Did something risky (N=124)		Regretted Sexual activity (N=127)		Victim of crime (N=126)		Drug use (N=126)		Unprotected sex (N=126)		Spoilt someone's night (N=124)		Injured self (N=125)	
	AOR	95%CI	AOR	95%CI	AOR	95%CI	AOR	95%CI	AOR	95%CI	AOR	95%CI	AOR	95%CI	AOR	95%CI
Individual unit change	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drinking pre-uni																
High	-	-	-	-	-	-	-	-	3.82*	0.60-4.92	-	-	-	-	-	-
Very High	-	-	-	-	-	-	-	-	2.52*	0.59-2.46	-	-	-	-	20.28**	0.89-11.4
Drinking at uni																
High	4.18*	0.58-5.94	2.24*	0.59-2.46	-	-	-	-	-	-	-	-	-	-	-	-
Very High	3.06*	0.45-6.01	4.25**	0.42-11.4	11.3**	0.63-14.5	4.95**	0.4-12.67	2.54*	0.47-3.92	7.51**	0.44-20.6	3.73*	0.40-10.5	-	-
Gender																
Male	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Age (years)																
21+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Smoked cigarettes (N=130)		Damaged accommodation (N=128)		Got into a fight (N=127)		Passed out (N=129)		Missed a class (N=132)		Memory loss (N=130)		Vomited (N=132)	
	AOR	95%CI	AOR	95%CI	AOR	95%CI	AOR	95%CI	AOR	95%CI	AOR	95%CI	AOR	95%CI
Individual unit change	-	-	-	-	-	-	1.01*	0.00-4.04	-	-	-	-	1.04*	0.99-1.09
Drinking pre uni														
High	4.59*	0.69-4.84	-	-	-	-	-	-	-	-	-	-	-	-
Very High	-	-	4.35**	0.5-7.8	-	-	-	-	18.4**	2.1-15.7	-	-	0.02*	1.3-5.4
Drinking at uni														
High	3.19*	0.46-6.22	-	-	-	-	-	-	-	-	-	-	-	-
Very High	2.81*	0.46-4.95	-	-	4.58***	0.4-14.3	-	-	-	-	7.59*	0.64-9.74	-	-
Gender														
Male	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Age (years)														
21+	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note. Reference categories for each variable are; drinking at uni (low/med), drinking pre uni (low/med), gender (male), age (18-21years)
 Statistics utilise a stepwise backward conditional logistic regression analysis with variables that are not significant ($P = 0.05$) being removed from the model and subsequently the model recalculated. Such factors are identified with '-'
 Significance is shown as * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$
 AOR = adjusted odds ratio

5.5 DISCUSSION

The aim of this study was to identify the perceptions, prevalence of alcohol use and related harms of first year halls of residence students during the move from home to university. The results begin by illustrating the extent to which students arrive at university with strong perceptions of a heavy student drinking culture (74% agreed pre-university that it was easier for students that drink to make friends). Upon entering university, perceptions of a heavy drinking culture strengthened. For example, the percentage of respondents who agreed that drinking excessively is important part of student life increased from 30% prior to university to 68% at university ($p < 0.001$). Further, I explored the social role of drinking across the transitional period and found that for the majority, alcohol featured regularly at university social occasions (62%) and was key to forming new friendships (61%).

Overall, the findings identify the transition to university as a high-risk period for excessive drinking which is associated with an increased risk of negative health and wellbeing outcomes and alcohol-related harms. Upon entering university, typical weekly median unit total increased by 15.5 units (15.9 units prior to university; 31.4 units at university) and an uptake of risky drinking behaviours were observed (preloading (prior to, 70%; at university, 89%); drinking games (prior to, 44%; at university, 54%) and drinking with intent to get drunk (prior to, 64%; at university, 75%)). Further, drinkers consumed excessive volumes of alcohol during freshers' period, with median unit total averaging 63 units during the 11-day freshers 'event.

Within this section I discuss the limitations facing the research, the implications of the results in relation to the existing literature and suggestions for future research and practice.

5.5.1 STUDY STRENGTHS AND LIMITATIONS

To my knowledge, this study is the first of its kind to explore students' drinking experiences and alcohol habits as they transition from home to university. Unlike the majority of student-based studies which recruit their population through subject lectures or internal mail systems (El Ansari, Sebena & Stock, 2013; Gardner et al., 2012; Gill et al., 2007; Heather et al., 2011; John & Alwyn, 2014) accessing students residing in university hall accommodation via a direct recruitment strategy is likely to have

exposed heavier drinkers who may be experiencing difficulties adjusting to university life and who may otherwise not be attending or engaging in university activities. In addition, the exploratory nature of this research fills a previously scarce field of literature and gives understanding into the extent, prevalence and importance of drinking experiences had by students transitioning to university. Further, in using a variation of drinking measures, engagement in high risk drinking practices at university, such as preloading and drinking games were observed. This is an important finding as many previous studies across the student-based literature fail to measure the heterogeneity of students' alcohol use (Davoren et al., 2016; Gill, 2002) often reporting on students' drinking quantities and occurrence only. There is therefore limited understanding of the high-risk drinking behaviors practiced by students within the university context (Haas, Smith & Kagan, 2013; Zamboamga et al., 2010).

The findings from this study should however be interpreted with the acknowledgment of the following limitations. Firstly, the results may be limited by the pragmatic sampling strategy adopted. Student hall representatives employed by the SU were called upon to disseminate the survey to students residing in university halls. However, when I came to look at the profile of the hall representatives, all student hall representatives were drinkers. As previous research suggests (Sher & Rutledge, 2007; Stappenbeck et al., 2010), young adults tend to navigate towards other individuals who share similar drinking habits. It may be that relying on novice student researchers to gather data had implications on the research process and narrowed the population of participants available to study. As I did not collect the data, I cannot be sure of the efforts student hall representatives made to disseminate surveys to all halls of residence students which may have resulted in a sample that reflects hall representatives' social network groups. Consequently, those students who were more moderate, or non-drinkers may not have been reached through the direct sampling approach adopted. To counter any limitations of the sampling strategy and encourage representativity, I spent considerable time training and mentoring the students, imparting knowledge on good research practice, ethical considerations, participant engagement, and representative samples; which myself and my supervisor who has expertise in researcher training developed. I also made clear that all student flats should be approached, and surveys should be

disseminated within student social areas. Hall representatives were also incentivised with shopping vouchers.

Although the sample was limited in size, it did broadly represent the demographic profile of first year university students residing in halls of residences in 2015/2016 (see section 5.4.1). Nevertheless, the small sample in this study does question whether the study has sufficient power to detect a difference between groups or identify true associations (Nayak, 2010). A larger dataset may have created more statistical power, however, extending the period of data collection or adopting a different recruitment strategy was not congruent to the overall research design. As the aim of the study was to measure the trajectory of students' drinking across the transition from home to university, extending the period of data collection would have introduced further recall bias and would arguably not capture the transitional drinking behaviours of first year students. Secondly, the researcher was limited by the time constraints of the subsequent research studies, re-collecting data a year later would have interrupted the succeeding research studies and affected the research timeline.

Further, where data was collected retrospectively non-differential misclassification may have occurred resulting in the underestimation of pre-university drinking levels. Asking for recall introduces potential bias and fails to account for large variations in respondents drinking behavior; to partially counter for this, drinking behaviour was assessed during a 'typical' week using beverage specific questions. Researchers have shown that when using beverage specific measures self-reported alcohol intake increases substantially compared to those using a unit calculated measure (Dawson, 2003; Ekholm, Strandberg-Larsen & Grønbaek, 2011). Although the retrospective measures on pre-university drinking behaviour were not optimal, previous studies have illustrated that short-term retrospective self-reports of consumption are reliable and valid (Del Boca & Darkes, 2003).

Due to the underdeveloped evidence base available on first year students' drinking (see Chapter 2), the survey was used as an exploratory method to measure a number of key aspects relating to the research problem and to inform the subsequent qualitative study (Chapter 6). This meant that the survey itself

included a diverse and large set of questionnaire items, which is likely to have caused limitations to the data collected. Past work has suggested that the burden of response when answering long questionnaires manifest into fewer responses and therefore more missing data. In a recent study measuring effective survey strategy (N=1000), individuals who received a short version of a questionnaire were 50% more likely to respond (AOR = 1.48, 95% CI: 1.06 to 2.07) than those who were provided with a lengthier version (Sahlqvist et al., 2011). Although using a shorter instrument to measure fewer items may have increased response and generated more statistical power, the survey design I used was necessary and allowed me to gain a broad insight into the research issue. Finally, to inform the survey I utilised a combination of theoretical concepts, such as the social norms theory (Perkins & Berkowitz, 1986) and previously validated measures (Baer, Stacy & Larimer, 1991; NUS, 2014; Osberg et al., 2010). However due to a limited evidence base some of the questions were bespoke to my research and were not derived from validated items (Question 21). These questions may be subject to measurement error (Bryman, 2008). To partially counter for this, I carried out extensive piloting with postgraduate students and several members of staff at the Public Health Institute at LJMU. Several items were removed, and others were reworded to improve the reliability of questions asked.

Research shows methodological difficulties when asking individuals to self-report their alcohol consumption (Van de Mortel, 2008). Social desirability, in which respondents inaccurately respond to questions in a way which presents themselves in a more favorable light, is likely to influence results in studies exploring sensitive topics such as alcohol use (Davies, Thake & Vilhena, 2010). To minimise social desirability, participants were informed of the complete anonymity of the questionnaire, students were asked to place completed questionnaires in blank envelopes and were encouraged to fill in the questionnaire privately on their own. Meta-analysis has previously indicated that these assurances can boost response rates to sensitive questions (Singer et al., 1995). Even after students had agreed to participate, they were given the option to omit items that they felt uncomfortable answering. In addition, the sampling approach adopted relied on social network bonds for compliance. It was anticipated that utilising student representatives who had pre-established relationships with the study population would increase study engagement and enhance participant disclosure. This sampling approach has also been

used previously to shift the power base of the research process from the researcher to the ‘objects’ of research (Burns & Schubotz, 2009). Through minimising power imbalances, it is expected that researcher bias is reduced, and the quality of the data collected is enhanced (Kirby, 1999; Lushey & Munro, 2014; Moore, Saunders & McArthur, 2011).

5.5.2 COMPARISONS WITH THE STUDENT-BASED LITERATURE

5.5.2.1 Pre-arrival perceptions of drinking

Various studies suggest that drunkenness at university is culturally accepted and expected (Carpenter et al., 2008; NUS, 2017; Piacentini & Banister, 2006). My study supports this, demonstrating that students arrive at university with varying beliefs about the university drinking culture and a diverse set of expectations around what student life entails. For example, prior to arrival, the majority of students in my study and the NUS 2016-2017 annual report (N=2,004 from 21 British institutions) presumed that university students got drunk most of the time (My study, 58%; NUS, 51%) and that getting drunk was an important aspect of the student experience (My study, 68%; NUS, 79%). My study further adds to findings from the NUS report by demonstrating that perceptions held by students strengthen upon entering university (Drinking excessively is an important aspect of the student culture; prior to university 30%; at university, 68% ($p < 0.005$)). It may be that the university context itself facilitates cultural norms of excessive drinking; this concept will be explored further in Chapter 6.

Shared beliefs and expectations provide cues to action for individuals transitioning into a new environment. Those students who enter university with internalised beliefs of a heavy student drinking culture are likely to be at greater risk of developing heavy drinking habits (Gusfield, 1987; Scanlon et al., 2007). Osberg and colleagues developed and validated the College Life Alcohol Salience Scale (CLASS) to assess the degree to which alcohol use is considered an integral part of the student experience. Since its development, higher scores on the CLASS have been shown to be robustly associated with elevated levels of alcohol use and consequences among American students (Bravo et al., 2017; Osberg et al., 2010; Osberg et al., 2011; Osberg & Boyer, 2016).

5.5.2.2 University drinking experiences

The current findings support those of others which have similarly demonstrated the link between alcohol use and socialising at university, most of these studies are however conducted through qualitative means (Larsen et al., 2016; Newbury-Birch et al., 2009; Seaman & Ikegwonu, 2010). For example, in a UK-based study which explored 106 undergraduate students' narratives from a single institution, heavy drinking was described by the majority of participants as an integral part of the social experience, used by students to facilitate peer bonding and increase sociability (Piacentini & Banister, 2006). The results from Piacentini & Banister (2006) concur with first year halls of residence students' experiences within the current study, in which 61% of participants stated that drinking aided new relationships and 62% felt that alcohol was central to socialising. Although drinking experiences can be diverse in nature, unlike most of the qualitative research in the field, the current quantitative study helps to develop understanding into the extent, prevalence and importance of drinking experiences had by students during the transition from home to university. Recognising the extent of positive functions and social experiences of drinking is important if these associations are to be meaningfully challenged.

There was also recognition of the sorts of pressure university students transitioning into university face. Pressure to drink at university has been documented elsewhere (Borsari & Carey 2006, Lewis & Neighbors, 2006; NUS, 2017; Perkins, 2002), however the proportion of students reporting pressure was far greater in the current study. For example, 50% of students in my study agreed that their university peers expect them to drink, compared to 35% of students from the NUS 2016-2017 report (N=2,004). Unlike the NUS report which includes undergraduate and postgraduate students, the current study comprises first year halls of residence students which could potentially explain the higher reported rates of peer pressure (NUS, 2017). Past international studies infer that student shared hall settings are associated with higher consumption levels when compared to other accommodation types (Lorant et al., 2013; Perkins, 2002; Thombs et al. 2009; Ward & Gryczynski, 2009). It is likely that shared residence environments facilitate contact with heavy drinkers and may therefore expose students to increased pressure to consume alcohol. Further, first-year students transitioning to university have more

demands to form new friendships in order to achieve successful integration (Mobach & Maskill, 2011) and acceptance. This sub-group of students may therefore experience more pressure to conform to normative drinking behaviours than students from subsequent university years.

5.5.2.3 Alcohol consumption prior to and at university

Drinking rates of the current sample of first year university halls of residence students exceed those of non-students within the UK population. In the most recent NHS health survey (NHS Digital, 2016), 23% of males and 14% of females aged 16-24 years exceeded UK weekly recommended guidelines (women, 14 units; males, 14 units; Department of Health, 2016), compared to 67% of males and 60% of females in my sample of first year halls of residence students. The weekly unit total consumed by the current sample also surpasses drinking rates reported by British first year students in past research studies (My study, 30.0 units a week; Bewick et al (2008a), 18.9 units a week (N= 3068 first year students); NUS (2015), 12.0 units (N=50 first year LJMU students)). The difference in outcome between the present study and for example, those of Bewick et al (2008a), and the NUS report (2015) could reflect differences in the screening tools used. For example, unlike Bewick et al. (2008a) who used estimates of unit total to measure alcohol use, the current study utilised beverage specific questions which have previously yielded higher rates of consumption and have proved more effective for accurate reporting (Ekholm, Strandberg-Larsen & Grønbaek, 2011; Stockwell et al., 2004). The timing of data collection during the academic year may also influence reported alcohol consumption. The NUS collected their data throughout students' examination timetables, whereas the current study was carried out in the weeks following freshers' period, where high alcohol intake is more likely. Further, the differences in outcome could also be attributed to the fact that my study was conducted on first year halls of residence students only, a sub-set of the population that has previously drunk at high levels (Lorant et al., 2013; Perkins, 2002; Thombs et al., 2009; Ward & Gryczynski, 2009). Finally, higher rates of alcohol use in my study could be ascribed to the direct recruitment strategy adopted. Accessing students residing in university hall accommodation via a direct recruitment strategy is likely to have

exposed heavier drinkers who may be experiencing difficulties adjusting to university life compared to online methods utilised by the NUS and Bewick et al (2008a).

The current observation that around 60% of students consume alcohol on more than one occasion a week is in line with reported first year student frequency rates. In a study which explored university drinking behaviours across five European countries (German, Slovakia, Poland, UK and Bulgaria (N=2529)), authors found more high frequency drinking in UK first year students when compared with undergraduates from across the other four countries (59% of UK student drinkers studied consumed alcohol on more than one occasion a week) (Sebena et al., 2012). Further, similar to other research, my study identified preloading and other risky drinking practices as common student behaviours (Clapp, Reed & Ruderman, 2014; Haas, Smith & Kagan, 2013; NUS, 2017; Quigg, Hughes & Bellis, 2013). Evidence indicates increased levels of preloading in UK student populations with as many as 90% of drinkers reporting home consumption before entering the nightlife environment (My study, 88%; Quigg, Hughes & Bellis (2013), 90% (N=227)), which is much greater than the reports of regular nightlife users reported elsewhere (Hughes et al., 2008, 58% preloaded prior to arriving in the NTE). The commonality of preloading at university illustrates a cultural shift over recent years which has seen the growth of at home consumption rather than public drinking (Hughes et al., 2008; Institute of Alcohol Studies, 2010; Jayne, Valentine & Holloway, 2011). One of the main reasons given for shifts in consumption is the cheaper price of alcohol in off- license premises; EU survey data indicates that alcohol prices in licensed premises are typically around three times higher than those in the off-premise trade (Rabinovich et al., 2009). It is important that students' motivations for preloading and drunkenness are understood further to inform prevention activity; motives behind risky drinking habits will be explored in Chapter 6.

Freshers' week is renowned across British universities as a period which aims to help new students acclimatise to their new environment, however the start of Freshers' week signifies intensive alcohol promotion by local retailers, alcohol dominant social events and a relaxed culture of intoxication (Fuller et al., 2017; JMSU, 2018; Riordan, Scarf & Conner, 2015). To my knowledge this study is the first of its kind to report British first year halls of residence students' consumption behaviours during this

orientation period. I asked study participants to retrospectively report their level of consumption during the 11-day Freshers' period. The average number of units consumed by drinkers was 63 units with the largest majority (25%) drinking 7-8 days out of the 11-day event. The heavy drinking rates recorded during freshers broadly corroborate with international based findings, although different alcohol screening tools are utilised by these authors which compromises our ability to compare findings. In a study conducted in Australia, first year students (N=130) consumed an average of 26 standard drinks across the one-week event. Interestingly, their study also found that men who reported heavy drinking during freshers were more likely to still be drinking at high and risky levels throughout the academic year than those who consumed lower levels ($r = 0.192$, $t(139) = 5.942$, $p < .001$). This suggests that the initial weeks of university may serve as a gateway to future university drinking habits (Riordan, Scarf & Conner, 2015). More evidence is needed to draw firm conclusions as to whether this trend translates to students within UK university settings.

One important finding was the observed changes in drinking behavior upon entry into university. Unlike the decreasing alcohol trends observed in UK young adults (ONS, 2018), for first year students in the current study, alcohol became more of a frequent feature in their lives at university than prior to. A high proportion of students reported increases in drinking levels (weekly unit total; prior to, 15.9 units; at university, 31.4 units), frequency (drinking two to three times a week; prior to, 20%; at university, 45%) and the adoption of new risky drinking behaviours such as preloading, drinking games (preloading (prior to, 70%; at university, 89%) and drinking with intent to get drunk (prior to, 64%; at university, 75%)). These findings, which are the first to report UK students' drinking during the transition from home to university, concur with a number of studies conducted on US students (Baer, Kivlahan & Marlatt, 1995; LaBrie, Lamb & Pederson, 2009; Sher & Rutledge, 2007; White et al., 2006). Although reported increases in alcohol use at university are much greater among the current sample than those reported across the US literature base (Hartzler & Fromme, 2003; LaBrie, Lamb & Pederson, 2009; White et al., 2006). In a longitudinal study which included a much larger sample (N=2,247) of incoming college students, the total number of standard drinks consumed per week increased from 3.49 and 2.61 pre-college to 6.56 and 4.82 in the first college year in both male and female students, respectively

(Stappenbeck et al., 2010). Comparable figures of males and females in my study were 18.6 units and 12.5 units pre-university to 35.5 units and 25.5 units at university, respectively. Although both samples were equivalent in terms of age, gender and education, the disparity in findings are not surprising given the differences in the tools used to measure alcohol and the cultural norms and legal differences (legal drinking age within the UK is 18 years as opposed to 21 in the US) that exist across the two nations (see Chapter 2).

5.5.2.4 Health and wellbeing

Data from UK university students suggest high levels of self-diagnosed mental ill-health accompanied by a 50% increase in demand for counselling services over the last 5 years (Weale, Perraudin & Yeung, 2016). In the most recent annual student experience survey (2017) conducted on 558 British first year students, stress (74%) and loneliness (68%) were the most commonly reported factors which were found to hinder coping at university (UPP Student experience report, 2017). Similar rates were reported by first year hall of residence students in my study with 60% reporting feeling stressed and 58% lonely in the first month of university. Numerous studies have associated excessive heavy drinking in university students with a maladaptive coping response to stress (DeHart et al., 2009; Goldsmith et al., 2009; Park & Levenson, 2002; Rutledge & Sher, 2001). According to the self-medication hypothesis (Khantzian, 2003), some students use alcohol as a compensatory means to deal with stressful events and to self-manage negative psychological states. In a study conducted on 1,197 first year English students, Mobach & Macaskill (2011) found that high levels of perceived stress and trait anxiety were associated with higher frequency of alcohol use in female students ($F(3, 70) = 5.28, p = 0.002$). Consistent with past studies, my findings suggest a positive association between negative wellbeing outcomes (stressed (AOR= 2.8, 95% CI: 0.4-6.7) and nervous (AOR=3.1, 95% CI:0.3-8.3)) and very heavy drinking among university students. My study further adds to past research by showing that increases in weekly unit intake upon entering university is associated with a regular feeling of homesickness (AOR=1.34, 95% CI: 0.09-14.6).

Although many view the transition to university as an inherently positive experience, this pivotal transition is fraught with numerous challenges and demands which can lead to maladjustment. US

studies report that the first year of university is when most psychological problems, such as depression, isolation and anxiety emerge and is when students report higher levels of distress (Fisher & Hood, 1987; Wei, Russell & Zakalik, 2005). Alcohol may be used by students as a means to overcome situations at university which are deemed as stressful and to ease homesickness, however ill-mental health is complex. It is unclear from my findings which way round in time these events occurred. It could be that being homesick exacerbated drinking, or it could be that drinking was a precursor to maladaptation and therefore ill-mental health. Hill (1965) recognises the importance of moving from association to causation as an essential step for taking preventative action against environmental influences on a negative outcome. Further research is necessary to examine the causality of mental health and wellbeing and alcohol use across this transitional period in order to identify the temporal link.

5.5.2.5 Alcohol-related harm

My study identifies the transition to university as a period of increased and risky drinking which is associated with a range of negative outcomes. The alcohol-related harms reported by first year students in my sample are much greater than those reported in whole student sample populations. For example, in a study conducted at a Southern university in England, of the 724 undergraduate and postgraduate students that participated, 15% had had unprotected sex, 24% had missed a university lecture and 21% had injured themselves as a consequence of drinking in the last university year (Penny & Armstrong-Hallam, 2010). Comparable figures of my study were, 51%, 79%, and 59%, respectively. Discrepancies across my study findings and those reported in Penny & Armstrong-Hallam (2010) could reflect differences in reference recall period. For example, Penny & Armstrong-Hallam (2010) measured alcohol-related harms in the last year at university whereas my study measures harms across the first university month. It is well established that self-reported behaviours such as harms are subject to error and that longer recall periods produce more recall biases (Bhandari & Wagner, 2006; Stull et al., 2009). It may be that students could recall their drinking events more easily in my study, leading to greater prevalence rates. Further, the differences in outcome could also be attributed to the fact that my sample was conducted on first year halls of residence students who drank at much greater levels than the sample of undergraduates and postgraduates participating in Penny & Armstrong-Hallam's study.

Consideration should also be given to the unique setting of each university. Prospective students in the preceding study (Study I, Chapter 4) conceived Liverpool to have a reputation for heavy drinking. It may be that universities renowned for their heavy drinking culture, such as Liverpool, draw in students who already drink excessively. It could be that my study therefore has selection bias as the students who attend may already be heavier drinkers than those at other universities.

My study also adds to the evidence base by illustrating that increases in alcohol unit intake upon entry into university is associated with several alcohol-related harms. While a larger scale study is required, this study is to my knowledge the first of its kind to document significant impacts of heavy drinking on students' health and wellbeing during the transition from home to university.

Pre-university alcohol use was associated with smoking cigarettes (AOR=2.52, 95% CI: 0.59-2.46) and illicit drug use (AOR= 4.59; 95% CI: 1.18-17.8) at university. Drawing on concepts from the Gateway Theory (Kandel & Faust, 1975), studies show that early substance use increases the risk of experimentation of illicit drugs in later adulthood (Bretteville-Jensen, 2006; Khurana et al., 2014; Agrawal & Lynskey, 2009; Nkansah-Amankra & Minelli, 2016). It may be that drinking at high levels pre-university sets an individual on a trajectory to smoke and take illicit drugs at university. However this theory has been the subject of considerable scholarly discourse as many studies have failed to confirm casual links between early substance use and increased use of other illicit drugs in later adulthood (Armstrong & Costello, 2002; Degenhardt et al., 2010; Tarter et al., 2006)

5.5.3 IMPLICATIONS FOR PUBLIC HEALTH, PRACTICE, AND UNIVERSITY PROVISION

Although there has been significant effort to reduce students' alcohol use across universities (Foxcroft et al., 2015), students still tend to drink at excessive levels (Davoren et al., 2016), which can put them at risk of harming their health and jeopardising academic performance (Hart & Burns, 2016; Thombs et al., 2009).

The findings of the current study identify the transition to university as a period of increased and risky drinking which is associated with a range of negative outcomes. The observed shift in drinking behaviour upon entry to university is concerning given that newly transitioned students are a young and vulnerable group, many of whom have left their family home for the first time to gain independence in a new city. As students move to university, they are also confronted with novel psychological challenges such as increased responsibility, academic pressures, and new peer exposures (Fromme, Corbin & Kuse, 2008), all of which have been associated with problematic drinking (Mobach & Macaskill, 2011; Piacentini & Banister, 2006). Avoiding alcohol during this time may therefore be difficult and confounded by the normalised culture of drinking at university (Carpenter et al., 2008; Piacentini & Banister, 2006). Given evidence which indicates heavy patterns of drinking established in the first year of university continue throughout students' life course and beyond into later life, the transition to university may present a unique opportunity for university based interventions which aim to tackle high risk drinking in the early stages of development (Bewick et al., 2008a; Mathurin & Deltenre, 2009; McCambridge, McAlaney & Rowe, 2011; Viner & Taylor, 2007).

Given the evidence that students develop strong perceptions of a heavy student drinking culture prior to university, there is need to target the positioning of alcohol and students' expectations of drinking prior to university. Social norms interventions which steer students towards the perception that alcohol is consumed moderately among peers and educates people about actual drinking norms have been used consistently across student populations to change consumption behaviours at university. The application of such approaches has led to short term decreases in alcohol use, however there is little evidence of sustained behavioural changes (Bewick et al., 2008b; Kypri et al., 2013; Kypri et al., 2014; LaBrie et al., 2013). It is clear that the university drinking culture presents a substantial obstacle to policy officials and universities interested in developing interventions to tackle alcohol use in UK undergraduates. The high proportion (68%) of students who agreed that drinking was a key aspect of the student culture within my study highlights the need for universities to advertise other aspects of life on campus and alternative events that do not rely upon drinking. Further work is needed to determine the types of events

or social occasions that could meet these criteria, especially given that previous attempts to change the culture have ultimately not been successful (Foxcroft et al., 2015).

Current policy approaches fail to recognise the social motivations underpinning consumption in peer groups and the associated positive outcomes of this during the transition from home to university (Foxcroft et al., 2015; Brown & Murphy, 2018). Findings from my study replicate evidence elsewhere which indicated that young people view drunkenness as highly significant in sociability, with drinking together considered important in the development of peer relationships (Seaman & Ikegwuonu, 2010; Brown, 2016) and in overcoming the pressures associated with transition to studenthood (Buote et al., 2007; Raffo & Reeves, 2000). The benefits of drinking such as enjoyment, togetherness and the sense of social identity are used to appeal to young drinkers across alcohol advertising however these social elements are often missed from alcohol prevention campaigns. If we wish to change excessive drinking at university there is a need to disrupt the meaning of drinking as a social practice and offer alternate occasions for socialising which do not involve alcohol, which is in line with assertions made by Davies, Law & Hennelly (2018); Ross-Houle & Quigg (2019) and Supski et al (2017).

Study findings develop our understanding of students' drinking during Freshers' period. In my study the current sample of first year halls of residence students drank at excessive levels (median unit total during the 11-day event was 63 units). Freshers' period could be utilised by universities to promote alcohol awareness practices aimed at limiting consumption and minimising harms. Previous efforts to raise awareness of alcohol at Freshers' fairs have however been contradicted by environmental norms promoting heavy alcohol use (Brown, 2016; Fuller et al., 2017). Should universities wish to challenge current student consumption behaviours, substantial effort from multiple partners, including university staff, the SU and on- and off- licensed premises is required (Sallis, Owen & Fisher, 2008).

This study found excessive and risky drinking in a cohort of first year student halls of residence students. Research indicates that those living on-campus in student hall settings consume more alcohol than those living in other accommodation types (Lorant et al., 2013; Thombs et al., 2009). Understanding whether halls of residences is a significant location for the development of heavy alcohol use could aid in the

development of more accurately targeted intervention practices, this concept will be explored further in Chapter 6.

Policy makers must also recognise the importance of at home drinking practices such as preloading (88% of drinkers in the current study regularly preload) and drinking games (51% of drinkers in the current study regularly play a drinking game). Current alcohol policy is heavily weighted towards regulating drunken behaviour within nightlife environments. This study however supports evidence (Hughes et al., 2008) that alcohol is commonly consumed at home before attending night-time venues. The policy implications for challenging high rates of preloading are unclear however changes in the pricing of off-licence alcohol, licence premise closing times and activities to prevent heavy drinking during a preload may lend themselves to reduced engagement (Foster & Ferguson, 2013).

The heaviest drinkers and those who increased their unit intake were found to have the highest rates of experiencing negative consequences, such as unprotected sex and injury and ill-mental health, such as homesickness and feeling stressed. This finding has implications for interventions aimed at highlighting potential negative outcomes of alcohol use across the transition from home to university and could be used by policy officials to raise awareness around the consequences of heavy drinking. There is a need for universities to respond to the risks that are associated with the transition to university by providing structured support for first time students transitioning to university to ensure first year students make friends, feel supported and settle into their new environment without the need to rely on alcohol (Mobach & Maskell, 2011).

Finally, given inferences in the current study which suggest heavy drinking prior to university is associated with cigarette and illicit drug use at university, early intervention which addresses excessive consumption before habits manifest could pose as an opportunity to cultivate more moderate health behaviours and reduce health risks at university. This proactive approach to reducing alcohol consumption has many advocates (Faggiano et al., 2005; Foxcroft & Tsertsvadze, 2011) and is further endorsed by drug educators (Mentor UK, 2011).

5.6 CONCLUSION

This research contributes to an important gap in the literature as it is one of the only studies to measure UK students' alcohol use during the move from home to university. Whilst the proportion of young people (16 to 24 years) consuming alcohol has decreased in the UK (ONS, 2018), the current study provides evidence of a cohort of young people who still regularly engage in high risk drinking with the aim of getting intoxicated. The upward trend of drinking is a concern given the wide-ranging associations with excessive student alcohol consumption and risk of negative consequences and ill-mental health. Areas which have a high density of university students often have intensive alcohol advertising, multi on and off-licensed retailers and cheaply priced alcohol, all of which have been correlated with increases in incidences of binge drinking (Kuo et al., 2003; Kypri et al., 2008). The findings from this study emphasise the need for the development of targeted interventions, which aim to prevent increases in drinking behaviour upon entry to university and minimise the harms related to heavy alcohol use. Further, the study highlights the importance of the norms and beliefs which govern the student culture, a wider approach which aims to challenge attitudes should be considered when tailoring health promotion efforts.

Further research is necessary to understand the complex nature of the transition to university, give insight into the context in which these drinking behaviours lie and examine factors which are associated with these heavy patterns of alcohol (see Chapter 6). In addition, research conducted on non-university students of a similar age would be beneficial in order to understand whether these drinking behaviours are inherent to the university context or are associated with emerging into adulthood more universally.

5.7 STUDY HIGHLIGHTS

- Students arrive at university with strong perceptions of a heavy student drinking culture which then strengthen upon entering university.
- Heavy alcohol levels and frequent drinking were observed during the first term of university (typical weekly alcohol consumption: males, 35.5 units; females, 25.5 units).

- The majority of students regularly engaged in at least one high risk drinking behaviour at university (e.g. 89% preloaded).
- Typical weekly median unit total increased by 15.5 units upon entry to university (15.9 units prior to university; 31.4 units at university).
- Students consumed excessive volumes of alcohol during the 11-day welcome period (the median intake of alcohol consumed by drinkers during Freshers' period was 63 units).
- Significant increases in preloading, drinking game participation, drinking with the intention to get drunk and a move to 'hard' alcohol, such as spirits were observed upon entry to university.
- Heavy and increased drinking at university is associated with a myriad of negative health, social and wellbeing outcomes.

CHAPTER 6: STUDENTS' EXPERIENCES WITH ALCOHOL AS THEY TRANSITION FROM HOME TO UNIVERSITY- STUDY III

6.1 INTRODUCTION

In this chapter I present the key findings obtained from 11 paired interviews conducted with first year LJMU students who had recently transitioned from home to university. This study aimed to explore the perceptions, prevalence and factors associated with alcohol use as well as related harms during the move from home to university and addressed all four research questions (see Chapter 3).

Past research in the US has addressed the issue of students' drinking across the transition from home to university quantitatively but to my knowledge this research has not been triangulated with qualitative data. The quantitative findings (Study II in Chapter 5) identified the transition to university as a high-risk period for problem drinking which is associated with an increased risk of negative health and wellbeing outcomes and alcohol-related harms. This chapter presents findings from a qualitative study which aimed to contextualise the quantitative findings (Study II, Chapter 5) by providing understanding and meaning to students' drinking. Through gaining insight into students' experiences with alcohol during the transitional period it is anticipated that findings might inform the development of future alcohol interventions by identifying new insights for policy makers and developers which offer support to transitioning students.

6.2 AIMS AND RESEARCH QUESTIONS

This study was structured around the four broad research questions:

1. What are students' pre-existing perceptions of the university student drinking culture and the role that alcohol plays during the transition into university?
2. What are the drinking behaviours of students' transitioning to university?
3. Are students' drinking behaviours before and during the transition to university related to health and social wellbeing?
4. What factors are associated with the trajectory of students' drinking across the transition from home to university?

6.3 METHOD

6.3.1 Sampling strategy

Respondents were recruited through a purposive multi-level sampling approach. Recruitment flyers and virtual copies of the flyer (see Appendix 16) containing a brief description of the study, including my contact details and incentives for participation (£10 Amazon voucher) were shared through LJMU social media outlets (Facebook and Twitter) and advertised on student information monitors around the university campus. Key contacts within the subject areas of sports science, health and social care, public health and nursing also sent recruitment emails directly to students enrolled on their teaching courses (Appendix 16).

Due to the slow response rate in initial recruitment activity an additional strategy was pursued which relied on direct recruitment from students' halls of residence. Utilising the relationships already made with key contacts within the SU, I was granted access to four halls of residence (see Chapter 5). Recruitment emails were sent to students' email accounts (approx. 500). The researcher was also permitted to directly recruit students through door to door recruitment and distribute flyers in and around the accommodation blocks over a two-week period.

The study relied on a snowball sampling method to recruit the peers for the paired interviews (see Chapter 3 for sampling approach rationale). It was anticipated that one participant would view the research recruitment material and then recruit one of their peers to participate. In order to ensure that the initial participant had not coerced their peers into participating in the study, both participants were given my contact details and asked to contact me separately. Potential participants were provided with a participant information sheet which included details on the purpose of the study and information on confidentiality and study withdrawal (Appendix 14).

The recruitment strategy included the offer of a £10 online Amazon voucher, the decision to use incentives was two-fold. Firstly, difficulties securing university student participation arose during the early phases of this research programme (Study II, Chapter 5). Secondly, incentives have frequently been adopted within other student studies and have been found to enhance participation response rates

by almost double compared to those studies which do not incentivise (Edwards et al., 2002). The incentives offered to participants within this study were store specific to reduce the chance of using them to purchase alcohol and low in value to alleviate concerns around induced involvement.

6.3.2 Interview schedule

Semi-structured interviews allow for open discussions around students' experiences with alcohol and an exploration into the reasons behind behavioural changes (see Chapter 3 for method rationale). The interview schedule was developed based on existing literature and the initial quantitative research phase presented in Chapter 5. The interview guide was piloted with fellow students at LJMU in order to ensure comprehension of questions and phrasing. Piloting led to the removal of some of the questions and a restructure of the interview guide. The final interview schedule was refined with the supervisory team to ensure questions were varied and open-ended (Appendix 19).

Similar to the student focus groups used in Chapter 4, visual aids were utilised at the beginning of the paired interviews. Imagery presented was obtained from local and national news articles, social media and the researcher's personal images and were used to aid discussion around the representation of the student drinking culture (Appendix 20). It was important to build a rapport in the onset of the interview in order to create an environment which was conducive to a conversation where participants felt comfortable discussing their own experiences. Visual aids were utilised as they can make the interview more collaborative and enhance the quality and depth of the interview through evoking memories and shared experiences (Comi, Bischof & Eppler, 2014).

6.3.3 Procedures and participants

In accordance with Research Councils UK Guidance, ethical approval was sought from LJMU's Research Ethics Committee. Recruitment began in September 2016 and data collection ran through to November 2016. Participants were eligible to take part in the study if they were in their first year at university and enrolled at LJMU. Eleven paired interviews were conducted (22 participants in total). Thematic saturation was considered achieved after approximately nine of the paired interviews as no new codes or themes emerged from the data, after 11 paired interviews I stopped recruitment (see

section 6.3.5). As the study endeavoured to explore perceptions and experiences of alcohol use during university transition, the sample comprised those who had most recently gone through the transition experience. As it was perceived important to understand alcohol's role during university transition there were no restrictions on whether participants were drinkers or non-drinkers.

The researcher liaised with all interviewees to identify a convenient, quiet and accessible environment in which to conduct the interview. The majority of the interviews took place in the university accommodation show flats which the researcher had been granted access to by two of the private accommodation partners. Two of the paired interviews took place within a private room on campus. Before each of the interviews commenced, participants were reminded of the study details, that participation was voluntary and that withdrawal from the study was possible at any point during the interview. Written consent was obtained from each of the participants (Appendix 14). Participants were asked to complete a demographic questionnaire prior to the paired interview comprising questions related to participant's age, year at university, living arrangement, ethnicity, gender and general alcohol use at university using a previously validated instrument (AUDIT C). Paired Interviews varied in length, lasting between 45 and 90 minutes.

Each of the interviews was recorded using two Dictaphones placed between the interviewees and interviewer, but out of clear sight to discourage self-consciousness when answering questions. All interviews were transcribed by the researcher verbatim and analysed using the NVivo10 software (QSR International Pty Ltd, 2012).

6.3.4 Research participants

The final sample comprised 22 first year students from LJMU who were aged 18-21. All students resided within university halls of residences on campus. Of the sample, 50% (N=11) were female. The majority of the sample were White British (90%, N=20). In terms of alcohol use, individuals within each of the pairs had similar drinking behaviours. Two participants did not drink at university. Of those that drank, 9% (N=2) drank monthly or less, 13% (N=3) drank two to four times a month, 59% (N=13) drank two to three times a week and 13% (N=3) drank four or more times a week. When drinking, 50% of the sample drank over 10 units during a single drinking session at university (see Table 19).

Table 19. Paired interview sample profiles

Paired interview	Participant	Sex	Ethnicity	Age	Recruitment source	University degree	Self-reported drinking behaviour	
							Drinking Frequency	Unit total*
1	1	Female	White	18	Social media	Media	4+ a week	7-9
	2	Male	White	20		Media	4+ a week	>10
2	3	Female	Mixed	19	Recruitment email	Psychology	2-3 days a week	5-6
	4	Female	White	18		Psychology	2-4 times a month	>10
3	5	Female	White	18	Social media	Psychology	2-3 days a week	>10
	6	Male	White	18		Civil Eng.	2-3 days a week	>10
4	7	Female	White	19	Halls of residence	Education	2-3 days a week	>10
	8	Male	White	19		Science	2-3 days a week	>10
5	9	Male	White	18	Halls of residence	Sport Coaching	2-3 days a week	>10
	10	Male	White	19		Sport & Ex.	2-3 days a week	>10
6	11	Female	White	19	Halls of residence	Creative writing	Never	0
	12	Female	White	19		Criminology	2-4 times a month	3-4
7	13	Male	White	19	Recruitment email	Sport & Ex.	2-3 days a week	5-6
	14	Male	White	18		Sport & Ex.	2-4 times a month	5-6
8	15	Male	White	18	Recruitment email	Computer sci.	2-3 days a week	>10
	16	Male	White	18		Mechanical Eng.	2-3 days a week	>10
9	17	Male	White	20	Social media	History	2-3 days a week	5-6
	18	Male	White	21		Business	2-3 days a week	5-6
10	19	Female	White	18	Recruitment email	Forensics	Monthly or less	5-6
	20	Female	White	18		Mechanical Eng.	Never	0
11	21	Female	White	19	Social media	Physical Ed.	2-3 days a week	>10
	22	Female	Asian	19		Sociology	4+ a week	7-9

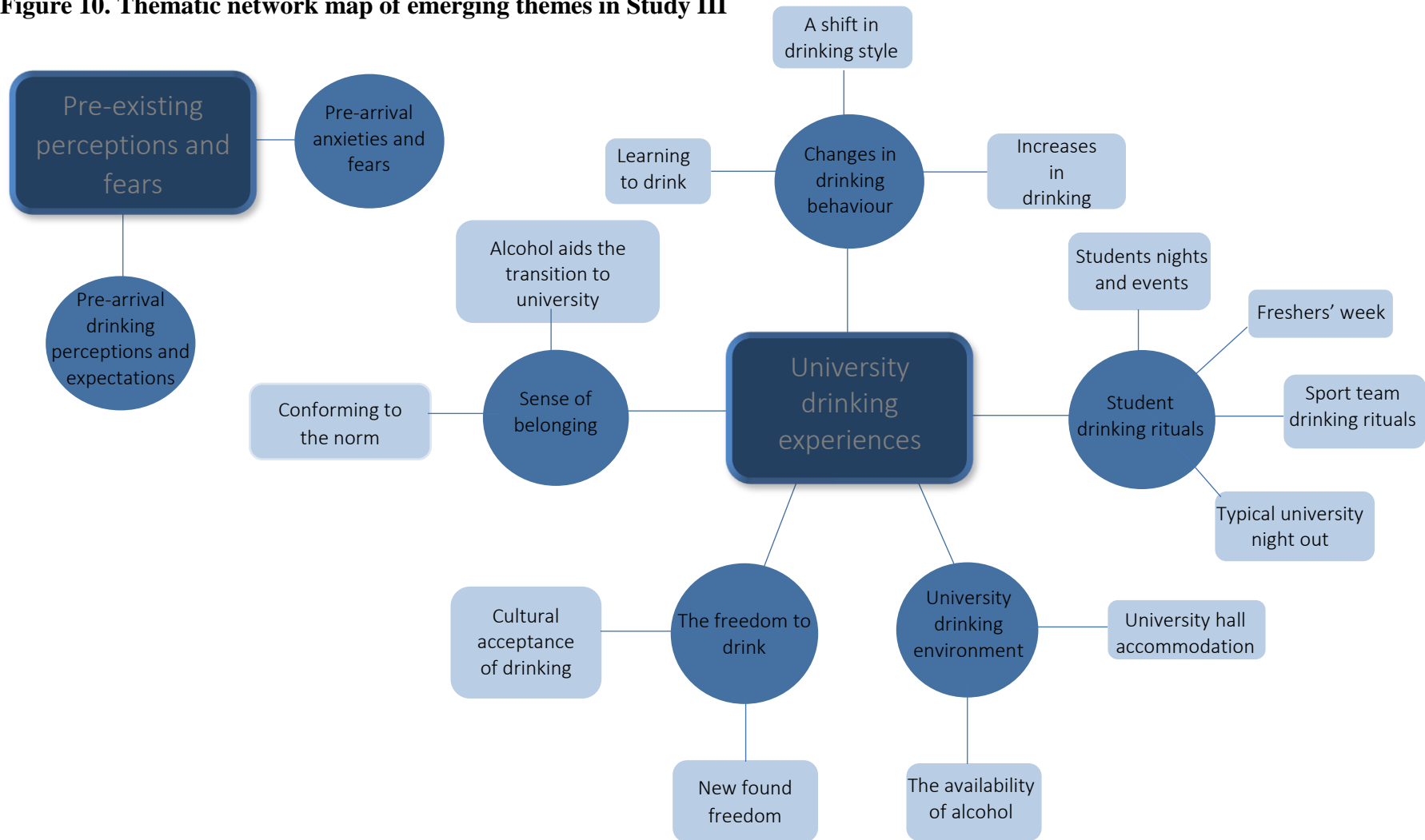
*Unit total during a single drinking occasion

6.3.5 Analysis procedure for qualitative data

Thematic saturation was considered achieved after approximately nine of the paired interviews as no new codes or themes emerged from the data (Ando, Cousins & Young, 2014; Morse, 1995). All interviews were audio recorded with permission from the participants and transcribed verbatim. Data were analysed using Braun and Clarke's six step process (see Chapter 3 for the step by step method of analysis) (Braun & Clarke, 2006). Data was collated and analysed in NVivo10 for initial coding of transcripts and organisation of subthemes and main themes. The initial steps of analysis involved reading through the scripts and making subsequent commentary and observations. All transcripts were then coded through open coding, these codes identified features of the data that I considered pertinent to the research questions. In a later step, these codes were reviewed and combined with similar codes. Emergent themes were then identified across the data and were grouped into thematic clusters. The coding scheme was influenced from the preceding data studies and were therefore developed through inductive and deductive analysis. The coding framework was discussed at several points in time with my supervisor who has expertise in qualitative methodology, to ensure consistent application throughout the data. The final refinement of codes into themes resulted in two overarching themes, (1) '*Pre-existing perceptions and fears*' and (2) '*University drinking experiences*', these themes are shown in Figure 10.

6.4 RESULTS

Figure 10. Thematic network map of emerging themes in Study III



6.4.1 Theme I: Pre-existing perceptions and fears

This theme included the perceptions and knowledge study participants had of the student drinking culture prior to arriving at university. For many first-year students the transition to university was also associated with increased stress and anxiety.

6.4.1.1 Pre-arrival drinking perceptions and expectations

When asked about perceptions of drinking prior to arriving at university one of the central themes was the belief of a heavy student drinking culture. Drinking at university was viewed as a normalised practice and presumed to be culturally embedded and a socially expected part of university life. The consensus among all students, even those who were non to low drinkers was that students drink excessive amounts of alcohol on a regular basis; with perceptions around drinking frequency ranging from twice a week to every day. This view was further accentuated by several students who implied that alcohol was intrinsic to becoming a student: *‘[Drinking alcohol] It’s just the student life isn’t it’* (P10, Interview 5). Holding such expectations appeared to shape some individual’s intentions to drink at university.

I thought, especially undergrads that they drank every night, I had an image of them going out and just being wild all the time and being really drunk (P1)

I thought it was like an expectation with university to be drinking a lot and going out all the time and being hungover, like one big party and I thought I would drink a lot more at uni than at home (P2)

(Interview 1)

All participants shared the opinion that Freshers’ week would be a period of excessive risky drinking and partying, with some students expecting to consume more alcohol in the two-week period than they ever had previously: *‘I expected freshers’ to be drinking a lot more than I ever had before and getting drunk every night for however long’* (P6, Interview 3).

An interesting observation made during the discussions around students’ preconceptions was that individuals often had trouble differentiating between their pre-arrival perceptions and their experiences

of drinking at university. This observation provides further rationale for Study I (Chapter 4), which explores high school and college students' perceptions of the student drinking culture in isolation.

6.4.1.2 Pre-arrival anxieties and fears

The move from home to university was accompanied by increased anxiety over new experiences and responsibilities, such as negotiating a new and unfamiliar place, new responsibilities of living independently as well as concerns over the separation from existing support networks. These concerns did not vary by gender.

I was nervous, yeh really nervous 'cause I didn't know anybody, I am the only one of my friends back home who has come to Liverpool, so I was sad about leaving them. It was really nerve wrecking not knowing anybody (P8, Interview 4)

The primary concern of students was the formation of relationships with new peers and successful integration into social peer groups. Not identifying with a group of friends within the early stages of transition was thought to hinge on successful adaption to university life. Several participants presumed that alcohol would be central to group belonging and therefore not conforming to the heavy drinking norms at university would lead to severe social consequences, such as social exclusion and fewer social relationships.

Well I think I was mostly worried about making new friends 'cause I didn't know anyone [...] (P6)

*Yeh I was terrified that no one would like me, I did think like maybe if you don't drink you wouldn't make as many friends (P5)
(Interview 4)*

For those who were non-drinkers (N=2), anxiety around the social pressures to drink at university were much greater. One female presumed that her decision not to drink would cause judgement and negative reactions amongst her new social peers. She felt she would have to defend her choices of abstention which made her anxious that peers would be non-accepting and would put pressure on her to drink: *'I thought I would be judged for not drinking and it would be like 'why don't you drink'. I was nervous to see what people's reactions would be to it' (P12, Interview 6).*

However, not all students shared concerns regarding the move to university, a few of the students were excited about their new independence and the opportunities to meet and form new relationships. In the extract below, one participant acknowledges that university is an idealised environment in which alcohol is consumed socially for fun, but at the same time can impose strict social expectations to drink.

I was excited about uni, like I thought making friends and drinking would be fun, but I thought if you didn't drink you would find it more difficult to fit in (P7, Interview 4)

6.4.2 Theme II: Changing drinking habits

The second core theme identified in the analysis explores the substantial change students make to their drinking habits as they enter university. Within this theme students' lack of knowledge around their personal drinking boundaries is explored as well as participants' accounts of their changing drinking habits as they transition from home to university.

6.4.2.1 Learning how to drink

Prior to arriving at university, many students lacked personal experience with alcohol. This did not vary by gender but could be associated with age and experience. Older drinkers criticised younger novice drinkers for their out of control behaviour and inability to resist social pressures to drink. These students implied that their early experiences with alcohol were fundamental in learning about personal drinking boundaries and necessary when declining peers offers to drink at university.

I have seen people try and neck like half a bottle of vodka not knowing or understanding what it will do to them in two hours I think they just give in to the pressure, whereas if someone told me to do that I would be like no I have done it before, I know what is going to happen. The ones that haven't drunk before don't know, now is the time for them to realise (P18, Interview 9)

Those with little drinking experience were unaware of their personal drinking boundaries at the start of university and described how they used others' drinking levels as a marker of how much they should consume: *'I don't think I really knew what my limits were, everyone's limits are different but then if*

you are going out for the first time with people you have just met you want to keep up with them and you kind of just want to keep in with the crowd and stuff' (P18, Interview 9).

The pressure to keep up with new peers' drinking often led to negative first-time experiences with alcohol. For example, in the extract below one female participant highlights how difficult it was when preloading to know how much alcohol to self-pour and cited that on several occasions she became too drunk and was unable to carry on with the rest of the night.

I had never pre-drunk before and I did find it really hard making my own drinks as I didn't know my limits. I wanted to keep up with the people I had just met but I ended up being sick a lot and I wouldn't make it out and would be put to bed early 'cause I just didn't know what I could handle (P22, Interview 11)

Learning through experience was also echoed in the narratives of novice drinkers. Through experimenting and exploring drinking limits in the initial weeks of university, those with little drinking experience described how they learnt to '*handle*' their drink and developed knowledge of individual tolerances. Many gained this knowledge through negative consequences, such as getting excessively drunk: '*I had a bit of an incident at the beginning with drink, where I got way too drunk, so I have sort of learnt from it to take more care now so don't get in that state anymore*' (P16, Interview 8).

6.4.2.2 Increased drinking at university

Drinkers within the study spoke of shifts they made to their drinking behaviour upon entering university, with increases in alcohol levels and frequency cited as common among all drinkers. Some students described their attempts to build up individual tolerances before arriving at university in order for their bodies to adjust to the excessive amounts of alcohol they had expected to consume.

In the summer before uni I thought I needed to get my tolerance levels up so me and my friends drank an awful lot like to kind of make sure we could handle our alcohol when we got to uni (P6, Interview 11)

One male participant who reported drinking heavily whilst at university, described bringing excessive amounts of alcohol with him in order to meet pre-institutionalised expectations and ease initial meetings

with new university peers: *'I turned up with so much alcohol, that is what I thought everyone else would be doing, I thought it would be a good way to meet new people'* (P16, Interview 8).

Compared to pre-arrival, the prevailing theme among all drinkers was that alcohol became more of a frequent feature in their lives at university. Although there was variation in how frequent individuals across the sample drank, for most, drinking prior to university occurred on a monthly basis and was usually carried out on weekends. In contrast, drinking across the sample at university occurred weekly ranging from twice a week to four times a week. With many participants stating that they attend student events through the week (Tuesdays, Wednesdays and Thursdays appeared to be popular drinking nights) and then drink again on either or both weekend nights. Similarly, participants cited increases in drinking quantity after arriving at university, although students did not explicitly state how much their consumption levels had increased by.

At home you would go out like once every couple of weeks and drink round a friend's house, but it wouldn't be like here where its every single week (P5)

Yeh at home it would definitely be more occasional rather than here [at university] where it is weekly (P6)

You feel it is okay to drink in the week when you are at uni and at home that's just not allowed (P5)

(Interview 3)

I drink a lot more here than home on a night out definitely, but I think that is 'cause I can handle it better and like I now know my limits so I can reach that point (P16, Interview 8)

Despite increases in drinking for the vast majority of students, for two participants drinking behaviours did not alter at university. One of the students who had taken a gap year cited this extra time prior to university as a period of heavy alcohol use and experimentation. She emphasised that this experience had given her time to explore drinking boundaries and the novelty of drinking had begun to wear off.

For some students I think they drink excessively 'cause they haven't been exposed to it before, so this is new this is fun, and this is crazy and as soon as the novelty has worn off it kind of dies away a little bit....and the novelty wore off for me about a year ago (P20, Interview 10)

6.4.2.3 A shift in drinking style

Not only had drinking frequency and alcohol levels increased upon entering university most interviewees spoke of changes they had made to the ways in which they consumed alcohol. These included changes to drinking location, increased engagement in high risk drinking practices and changes to beverage preference.

Prior to university, pubs, house parties and friends' houses were common forums for social interaction and drinking. Drinking at these locations tended to take place with friends or family, where there was much less of a focus on getting drunk *'Back home most of the time I would go to the pub or drink at home, but our parents would normally be there, you wouldn't really get drunk it would be more just to have a laugh with your mates'* (P2, Interview 1). In contrast, drinking at university was largely practiced in halls of residence and in local nightclubs and bars with students' new flat mates. As we see from the responses below, unlike at home *'getting hammered'* emerged as the key activity carried out among new university peer groups.

*We used to just go straight into town, now we get drunk in the flats before we got out
(..) it's just so different (P22)*

Yeh I also feel like uni is more of a competition who can get the drunkest (P21)

Yeh who can remember the least (P22)

Whereas back home it's like who can have the best time (P21)

(Interview 11)

A prevalent theme that ran central to most of the narratives was the commonality of preloading at university. Across all drinkers' narratives preloading engagement increased significantly upon entry to university. Not only had engagement in preloading increased but as the extracts below exemplify, students drank more and for longer during a preloading session. Prior to university, preloading took place at the family/friend's home or in local pubs/bars during the early evening, which usually involved two to three hours of group drinking (between the hours of 7 and 10.00pm). In contrast, preloading at university became more of an important feature of a nights drinking, often beginning between the hours of 7pm and 9pm where students preloaded for much longer and entered nightlife spaces later in the night, between the hours of 11pm-1am.

Back home we never used to pre-drink like we do now, like we would all meet up get ready and just go out. Whereas now it's like from eight, nine o'clock till about eleven thirty we are playing games and we drink a lot more during pre-drinking now (P15, Interview 8)

'Cause here you are not going out till half twelve - one whereas if I was going out with a friend from home you would be getting in at that time 'cause you just go to the pub (P14, Interview 7)

As highlighted in the extract below, drinking games rarely featured as part of the preloading practice prior to university, this appeared to change once students entered university as students began to experiment and learn a variety of different drinking games.

I didn't play many drinking games back home, no we would always sit around and play music instead of drinking games. But when I came over here I had never heard of 'ring of fire', so that was the first time playing it when I got here (P1, Interview 31)

Some also made a conscious move towards higher percentage alcohol, such as spirits. Spirits were favoured for the intoxicating effects, as well as being easier to consume quickly when compared to other drink types.

I would probably say [prior to university] we wouldn't get as drunk because we would normally go to the pub and just drink ale or beer, but at uni it's like we go out to clubs and I now drink spirits, which is what I get most drunk on (P16)

And on spirits you don't get bloated, so you can drink it quicker (P15)
(Interview 8)

6.4.3 Theme III: University drinking rituals

The previous theme explored changes in students' drinking behaviour upon entering university, in this section common drinking rituals and customs experienced by students during the transition to university will be examined. Although individual's specific drinking experiences varied substantially, the data illustrates a consistent general structure to a student night.

6.4.3.1. Freshers' week

One common ritual that nearly all the students took part in was Freshers' period; an event which ran for two weeks at LJMU. Freshers' period was characterised as a period of acclimatisation in which students explored their new environment and developed and maintained new social network groups. For most, the main aim during Freshers' period was to socialise and get '*absolutely annihilated*' (P10, Interview 5). Students viewed this event as the first opportunity they had to '*test their drinking limits*' (P1, Interview 1) in an open and autonomous environment where they had few restrictions and new-found independence. It appeared to be difficult to escape the excessive drinking norms during the event due to the high number of alcohol focused social events and intensive alcohol promotions. These concepts will be discussed further in theme IV.

Freshers is just like on big party, we drank a lot during that time (P17)

Yeh it was kind of seen as a time to push our limits and see what we could get away with as for the first time no one is really watching you (P16)

(Interview 8)

Several of the students described the negative associations that the two-week event had on their health and studies. In the extract below, P15 described developing '*freshers' flu*' whilst P14 spoke of more detrimental effects that excessive drinking had on his studies, health and fitness.

I was quite ill after freshers, from drinking and smoking so much, I think they call it freshers' flu but the health effects have sort of gone now (P15)

I have regressed quite a bit since [drinking], like I told myself I would study a lot and I haven't really done anything. My health well not my health but like fitness has gone down quite a bit as well so I am trying to get back at it (P14)

(Interview 7)

Others spoke of experiencing hangovers, missing classes and putting themselves at increased risk when drinking during the event. For example, on the first night of Freshers' period one male student recalls his experience of losing self-control and awareness when walking home alone when drunk.

On the first night I got really drunk out with the group and I walked home on my own but walked the complete wrong. I was stupid to walk back on my own, I have never been to this city before so had no idea where I was and was lost for hours (P14, Interview 7)

Overwhelmingly, across most of the accounts drinking frequency and quantity decreased after Freshers' week but drinking still remained higher than students' drinking habits prior to university.

Once freshers' finished it kind of settled down a bit and now, we only go out two or three times a week, it is still different from back home like I would be going out once or twice a month if that (P15, Interview 8)

6.4.3.2 A 'typical' university night out

6.4.3.2.1 Drinking to get drunk

Drinking during a night out at university was found to be an important, common and ritualised behaviour carried out by students when socialising. As highlighted in the quotes below, the consumption of alcohol at university had become synonymous with the pursuit of drunkenness, where the idea of drinking and not feeling the intoxicating effects was found to be highly undesirable. Only a few students expressed casual drinking at home or in the local pub.

Yeh there is always alcohol involved, we would never go out and not drink (P1)

It would be weird I would just feel out of place if I were sober on a night out, we definitely drink to get drunk don't we? (P2)

(Interview 1)

I don't tend to drink unless I am drinking to get drunk type thing, which is quite bad (P16, Interview 8)

Gender differences were particularly visible in the discussions around drunkenness. Four interviewees suggested that male students were more likely to drink to get drunk at university when compared to their female counterparts: *'the lads go harder definitely'* (P3, Interview 1). These students drew on traditional values and agreed that getting drunk was a marker of masculinity which enabled acceptance within male social groups at university, whereas it was agreed that females primarily drink to socialise.

Others however did not share this view and agreed that there were similarities in how much male and female students drank at university, ‘*Girls are just as bad*’ (P8, Interview 4).

I think it is cause with the lads it’s like alpha male sort of thing like who can drink the most rather with girls it’s more like let’s have a bit of a quiet drink and have a laugh with your mates (P9, Interview 5)

6.4.3.2.2 Drinking preparations

Drinking during a university night out was first and foremost positioned as a social practice that involved planning and communicating with peers to arrange details such as the drinking location and purchasing of pre-drinks. From the beginning of Freshers’ week, students set up social media groups with members of their own flats and others in student halls which they used to communicate and arrange pre-drinks. These networks were frequently used by members to express their interest in a night out or encourage others to go out drinking. Students spoke of nominated flats that hosted pre-drinks, such locations had developed a reputation as key gathering places and were referred to as the ‘*party flats/blocks*’.

*On our group chat we always get at least one person saying anyone out tonight?
There is at least one person up for a night out every single day [...]* (P21)

Yeh we have a group chat with our block and everyday someone will ask who is going out tonight, you get some people who are really up for it, some flats are renowned for like being the party flat (P22)

(Interview 11)

As the extract below suggests participants begin their night by preloading. Preloading in all drinkers’ accounts was described as an enjoyable practice which was routinely carried out in a group context. For some, preloading was the most favourable part of the night as it provided a relaxed atmosphere in which students got to spend time socialising with friends something which was difficult in busy and noisy nightlife spaces.

I prefer pres (preloading) to going out (P16, Interview 8)

When you go out it can be a bit repetitive if you are going to the same club, whereas when you are having pre-drinks, it's always different cause you are with different people, it's just more social as you can talk (P4, Interview 2)

All participants agreed that preloading was a practical choice used to reduce the amount of money spent on alcohol in nightlife spaces, with students using this time to 'create a level of drunkenness' (P14, Interview 7) before heading out for the night. Preloading was seen to be necessary in order for students to cope with new financial strains and the increased frequency of drinking at university: 'I think the student life is pre-drinking till your almost gone and then going out on a tenner and having a sick night, cause we go out a lot and no one can afford it if we didn't pre-drink' (P10, Interview 5). Seven students implied that preloading led to increases in their alcohol levels during a night out 'Pre-drinking does play a big role in how much you drink' (P3, Interview 2).

If you are in uni and you go out a lot you pretty much have to pre-drink cause you just can't afford it (P5, Interview 9)

For me it's about getting drunk, so I don't have to spend as much money when I am on a night out so, yeh that is mainly my reason for prinking hard (P9)

There have been nights where I have gone out and literally not bought anything out (P10)

(Interview 5)

Although reducing the cost of a night out was the primary reason students provided for preloading, many also referred to the social elements of the practice. Preloading was socially beneficial and helped to reduce inhibitions around unfamiliar peers and bring groups together, especially during the initial weeks of university.

It's a big ice breaker I think like during preloading in you got to hear funny and embarrassing stories and you sort of become more accepted in the group sort of thing (P10, Interview 5)

Preloading was also discussed as a context for getting ready, especially across female narratives. During this time, female students drank socially whilst altering their own appearance. One female participant implied that during this preparatory stage less focus was placed on how much alcohol is consumed.

There appeared to be variations across male and female narratives when discussing this stage in the night, with male students placing less emphasis on *'getting ready'* giving them more time to get drunk with other male peers. One female participant described how she often felt she had to then play *'catch up with the lads'* (P2, Interview 1) to compensate for the time spent preparing for the night, which occasionally led her to getting too drunk and not make it out.

Yeh see I think it is the buzz for girls, like we pre-drink whilst we get ready and you just kind of bond more and stuff (P1)

I think I would pre-drink more because I don't spend as much time getting ready so then there is more time to focus on drinking (P2)

Yeh but at the same time cause it takes girls so long to get ready we try to squeeze in as much alcohol as we can, so usually I don't even make it out (P1)

(Interview 1)

Drinking games were an embedded feature of the preloading practice at university. Several drinking games were referred to across the drinkers' narratives, these included *'ring of fire'* and *'never have I ever'*¹⁶. Games were also created from simple tasks such as eye contact or body movements as well as ordinary games, such as Jenga or cards: *'games you wouldn't normally put drinking with you turn into drinking games at university'* (P4, Interview 2). The accounts of both male and female participants showed that the primary aim of a drinking game was to *'get everyone trollied'* (P5, Interview 10) before heading out into the nightlife environment. Some revealed that games often ended with students downing their beverages, mixing drinks or racing others to finish their drinks: *'Downing (..)drinks, it's like you do it to have fun drinking and it gets you drunk quicker'* (P8, Interview 4). Games were also used to nominate others to drink which led to those who were sober being targeted by other game players. Similar to the motivations for preloading, drinking games were used by participants to ease socialisation, acting as a quick way to get to know unfamiliar peers and bridge social barriers. Game

¹⁶'Ring of fire' is a drinking game which involves players consuming a predetermined amount of alcohol based on the card they select from a circle of playing cards.

'Never have I ever' is a drinking game which involves each player simply stating what they have not done. Those players that have at some point experienced that action must drink.

playing represented positive reinforcement for students enabling them to improve the atmosphere of a night and acted as a source of fun.

It is the most efficient way to get drunk without spending money (P16)

And they are also funny, like you can aim them at people who are sober and it is used to get people wasted, and find out funny things about each other (P5)

(Interview 8)

It's a big ice breaker I think like during freshers, 'Never have I ever' and stuff like that it was just funny to hear embarrassing stories and you sort of you know become more accepted in the group sort of thing (..) so I think that is why it is a big icebreaker really and you can have a really good laugh with it as well (P10, Interview 5)

6.4.3.2.3 Student nights and events

Interviewees felt that the majority of social events that were advertised across the university were centred around alcohol. With no alternatives to drinking these students expressed that they often went out drinking to avoid boredom.

What else is there to do, we didn't go out on one of the nights during freshers' and it was boring. Going out, it is not cheap, but it is the cheapest thing to do to enjoy yourself, there isn't really other options (P14)

Yeh what else is there to do, everything involves drinking (P13)

(Interview 7)

Students identified popular student nights and alcohol fuelled events such as 'Level Wednesday's' and 'Quids in at Heebies'. Cost appeared to be an important feature when deciding which event to attend. Events on a Wednesdays appeared to offer extreme student alcohol discounts 'Wednesday's are cheaper than any other day' with offers such as 'two-pound fifty double vodka mixers' 'quid's in' and 'one-pound shots' frequently referenced. Wednesdays were also the night that societies held their social events, which made the night popular across the whole student population.

For some, which event they chose to attend depended on whether they had university the next morning, with early morning lectures often acting as reason for students not to go out drinking. This however

was not the case for all students: *'like now we can turn up to lectures on like 50% brain life'* (P12, Interview 6).

There are student events all week it just depends on your timetable (...) we are in from nine to six on a Wednesday, so we would never go to the events on like a Tuesday (P13, Interview 7)

6.4.3.2.4 Sport team drinking rituals

University offers the opportunity for students to join societies however, the drinking activities of some of these groups appeared to be excessive, ritualised and cohesive. Members cited the exclusive rules of drinking amongst their sport teams, such as consuming a predetermined amount of alcohol during a night of drinking and suggested that joining in with these rules facilitated a sense of collectiveness among the group.

Well when we go out like you have to drink a certain amount, like you have to drink four pints of alcohol and a shot in every round, I think it is so everyone feels like they fit in. But it helps with like team cohesion and during the game a better sort of connection between each other (P21, Interview 11)

The reputation of sport societies had led to concerns amongst some non-members about whether they could match the excessive levels drunk by older members.

I am a little bit worried about the nights out 'cause I don't think I can keep up with levels five and six (...) 'cause they have been at it longer than me (P12, Interview 6)

Customarily, sport societies host their social events on a Wednesday night. It was recognised by one female society member that the SU are in paid partnership with the leading student events company in Liverpool. She inferred that from this partnership, society members get discounted entry and drinks at selected bars and nightclubs (including Levels) on a Wednesday and therefore her society felt obligated to attend these venues in order for the sponsorship to sustain.

Basically, all our societies are through the SU who get sponsored by 'Cool it' by a certain amount. We then are kind of obligated to go to McCooleys and then Levels every Wednesday as they have been known to get annoyed if people go elsewhere. At

these places we get into events for free and then free and discounted drinks (P21, Interview 11)

Another sport society drinking ritual involving newly transitioned students referenced across the data was initiation ceremonies, despite being banned by the SU. As the extract below exemplifies, such events involve putting new members through several difficult challenges in order to confirm membership. These challenges are centralised around excessive consumption of alcohol, but also aimed to abuse, humiliate and in some cases endanger new student members. P3 highlights how risky these events can be having observed some of the initiations himself. He describes how those who have already been initiated instruct new members on how much to drink. Other rituals that were not focused on drinking included dressing in humiliating outfits and being forced to eat or be covered in unpleasant food.

I had a friend who was on the female football team, they were given a buddy, so like a member who is in the next year up and their job is to get their person as drunk as possible. But by the end of it, they had all left her in Liverpool on her own and she wasn't even able to stand up properly and she had to call her boyfriend to come and get her (P3)

And my mate had to wear a baby nappy and that was it nothing else and he said they had to eat like raw eggs and things (P4)

(Interview 4)

Have you been involved in any initiations?

Err can I not answer that question (P21, Interview 11)

6.4.4 Theme IV: The university drinking environment

Within this theme comparisons between the alcohol environment at home and at university are made by students. Further, participants describe the availability of alcohol and the intensity of alcohol marketing on campus.

6.4.4.1 University hall accommodation

Prior to university, a large majority of participants lived in small villages or towns which were located

far from nightlife drinking spaces. This made arranging a night of drinking difficult and costly as parents or taxis would have to be relied upon for transportation: *'We had to travel if we wanted to go out'* (P1, Interview 1). In contrast, the proximity of student halls of residence to nightlife spaces and retail outlets meant that a night out at university required less planning and reduced transports costs, making *'going out drinking much easier'* (P13, Interview 6). Further, not having to rely on parents for transport also permitted students to enter and return home from a night out at whatever hour and in: *'whatever [drunken] state'* (P9, Interview 4) they pleased.

I didn't really go out that much when I was at home, I didn't have the opportunity. It is different here because everyone is living in the same accommodation, we are already in town so it we can easily get to places. At home we used to have to get a bus or work around our parents to get to the clubs (P22, Interview 11)

I think that people come back later here because you can just walk home, where I am from you would have to book a taxi, it's just loads easier here to plan a night out (P14, Interview 7)

As has already been indicated (Theme III), preloading before a night out at university occurs within students' halls of residence flats. Several students felt that the open plan and communal areas within student hall accommodation created flexible social drinking environments, more conducive to preloading than the family home: *'I think that the flats at uni just create a better environment for pre-drinking, you can get loads of people round and just drink, we never really had this before'* (P8, Interview 4).

6.4.4.2 The availability of alcohol

One of the central themes concerning changes in drinking during the transition to university was increased opportunity to drink. Nightlife spaces at university were found to be more appealing to participants as they offer more variety, are busier and target a younger audience compared to the outlets prior to university: *'Back at home town was dead through the week and full of old people, whereas at uni there is stuff for students all through the week'* (P6, Interview 3). Further, drinking spaces surrounding university were also open until much later enabling students to preload and enter the nightlife environment later: *'Here a lot of the clubs are open till like five six in the morning, so we just*

go out a lot later' (P14, Interview 7).

Yeh we knew how good Liverpool was so it is a massive change, so much better, so much more differentiation in clubs. You are just more ready to go on a night out here and you drink more for it. Cause when you are going for a night in [home location] you might not drink that much cause you don't want to waste money on a boring night, but you will always have a good night in Liverpool (P10, Interview 5)

The availability and heavy promotion of alcohol during the first university term was frequently cited across the narratives. Marketisation of freshers' events started before students even moved to university. Students described how they received emails with links to promotional material advertising the alcohol events scheduled during Freshers' period. Promoters also utilised Facebook and other social media sites to encourage new incoming students to purchase club night passes (<https://www.facebook.com/LiverpoolFresherStudents/videos/1242660302507424/>). Several students described how they felt pressurised into buying freshers' bands¹⁷: *'The websites said that tickets would sell out quick, so I felt like I had to get one'* (P2 Interview 1), with those who had bought tickets feeling anxious that they may be the only ones who had purchased the bands and those without feeling they may be left out from social situations.

We got a lot of emails, like UCAS sent us one with a link to the SU which advertised freshers' event encouraging us to buy the wristbands. I felt like I had to get one as everyone had got the email so would be getting one. Also, Facebook pages got made which promoted all the club nights, in the pictures everyone was having a rave, there wasn't any photos of lectures it was just all about partying (P11, Interview 6)

This messaging presented to students prior to their arrival was all related to heavy alcohol use and further developed pre-arrival expectations of alcohol and the associations with Freshers' week: *'Cause Freshers was advertised so much within the run up to uni, I think everyone expected that they were going to spend like a solid week of drinking'* (P1, Interview 1).

¹⁷ Freshers' wristbands are sold by the SU and give purchasers free entry and discounted alcohol in certain venues and bars.

Once students arrived at university the intensity of promotional activity heightened. In and around the student areas promoters handed out flyers for venues with drinks offers attached. This material was also posted around student halls of residence and in students' accommodation. The quote below, by a male student recalls some of these incentives.

I think it is like mainly all the advertising and everything, there is so many offers on like you have like one-pound tequila shots and then you have got like quid's in at Heebie Jeebies and then like quid bottles of Carlsberg. I think that is what attracts everyone the cheapness of everything (P1, Interview 1)

They have a lot of people sort of on the streets giving out flyers with all these cheap deals (P13, Interview 7)

P1 highlights the impact that this advertising has on influencing drinking behaviour.

The advertisement for first years is just insane you get so many letters through the doors and all of that and it like gets you excited for it so (P1, interview 1)

The Freshers' fair primarily used by societies to sign new up members was also a hub for alcohol advertising. Branded freebies, such as drinking cups and bottled alcohol were used to promote nightclubs and alcohol centred events. The extract below illustrates the failed attempts and problems universities face around challenging the cultural norms of drinking, in which a health promotion stall was positioned next to a branded stall handing out free alcohol.

Do you remember at the freshers' fair, there was a stall promoting the awareness of alcohol telling students how many calories are in each alcoholic drink which was next to a stall giving out free cans of Desperados? (P22)

Yeh that was funny (P21)

(Interview 11)

6.4.5 Theme V: Freedom to drink

Drinking at university was associated with new found freedom to drink. Within this theme, students discuss the concept of developing independence at university, referring to some of the restrictions that

existed prior to university within the family home. The majority of students also describe the widespread acceptance of alcohol use across campus as one of the key reasons for changes in drinking habits.

6.4.5.1 New found freedom

Many students spoke of the restrictions and sanctions around drinking which existed in the family home prior to arriving at university. As referred to in Theme III, due to restrictions in location drinking prior to university would usually take place within the family home which meant students would drink under the 'watchful eye of parents' (P21, Interview 11). Parents acted as a moderator for alcohol use with several students stating they felt uncomfortable drinking in front of their parents and preferred to keep their drinking behaviour hidden from family members.

I think uni does make you drink a lot more, I think it is just a thing and because you haven't your parents you've got more freedom you can do what you want (P6, Interview 3)

I have never gotten too drunk in front of my parents ever, I have to keep my social side and my family life completely different, so we just didn't really drink that much (P22, Interview 11)

In the quote below, one male student compares the restricted views of his parents with the accepting and non-judgmental views of his new university peer group. He describes how peer acceptance enabled him to transgress easily from his previous drinking habits.

Yeh, I think it is a big thing as well that the glaring eyes of parents are not watching what you are doing. Like when I arrived [at university] all my mates didn't judge me if I was sick all over the floor, so I think I did go a bit harder at uni 'cause I knew I didn't have the burden of explaining myself to mum and dad (P10, Interview 5)

For all students, bar one, university was the first-time that they had lived independently away from the family home. The move to university was positioned by a strong majority as a time of independence which gave individuals freedom to take risks: 'It's just like in the first year you are away from your parents, you can literally just do what you want' (P4, Interview 3). Five of the pairs described university as a life stage which was free from any major responsibility and discrete in comparison with adults and

similar aged peers who had the burden of a career and family commitments. This was seen to therefore give individuals a rite of passage to act in ways that may otherwise be viewed as unacceptable.

I think it would be different if you didn't go to university, like some of my mates who have a job or apprenticeship it limits what they can do so they only really go out on a weekend (P16)

Yeh the way I see it is that now we have minimal responsibilities we don't have a family to feed or anything, we don't have to look after our parents [...] so you know we can drink out of our minds as we have nothing bearing on us, you have the rest of your life to be serious (P17)

(Interview 8)

Others associated changing drinking habits with their new adult status referring to the legal parameters which restricted drinking prior to university. For the first time, students were of legal drinking age (UK legal drinking age is 18 years), and as P18 infers, this new adult identity allowed for personal exploration, experimentation, and the opportunity to learn from mistakes.

It's like independence 'cause you have that freedom and you are legally allowed to have a drink so you can finally try alcohol it is your chance to do it, especially with your parents not being around. Like you can get drunk and silly but then I guess you also learn from it as well (P18, Interview 9)

6.4.5.2 Cultural acceptance of drinking

Students noticed a variation in the rules and acceptability around drinking in Full-time (FE) and Higher Educational (HE) settings. At university there was the perception that heavy alcohol use is accepted across campus. Students considered turning up to teaching sessions hungover or failing to attend classes due to a heavy night of drinking as acceptable. There was the general view that such behaviours if carried out in FE settings would lead to social stigma and personal sanctions.

When we moved to university, we noticed that like every day is acceptable to go out, like there will always be someone that is going out through the week, whereas back home they would be like are you crazy (P3)

I think it's because if you miss uni they don't make you catch up, whereas if you are at school and you missed a lesson they would ring your parents, so it think is more the freedom that leads to drinking more than anything (P4)

Yeh it is just more acceptable to skip uni when you're hungover (P3)

(Interview 2)

In one case, a course social event which was organised by the staff at the university was held in a well-known bar. As P13 highlights each of the students were given several tokens which they could exchange for alcohol, thus enabling students to get excessively drunk during university hours.

We had a course social at Bierkeller and I didn't think they would do that to be honest (P14)

Yeh they had two and a half grand worth of drinks tokens (P13)

Yeh like within twenty minutes I had bought like a four-pint pitcher for myself, we all got wrecked (P14)

(Interview 7)

Others spoke of receiving more academic independence at university such as less workload, reduced contact with academics and less scheduled teaching sessions '*We haven't got to be in as much, like there is less work as well so we have more freedom to go out and drink*' (P10, Interview 10). These changes gave students more freedom and time to go out drinking and were cited by a significant number as reasons for their increased consumption. The freedom to drink was limited in some respects by the courses that students were enrolled on, those doing vocational courses such as teaching had the added commitment of placements which gave them less time to spend drinking and more responsibilities '*My friend is doing Primary Ed and she is literally in nine to five every day, whereas I am in uni two days a week, so am hardly in to be honest and can turn up in whatever state I want they won't really mind*' (P21, Interview 11).

The first year of university in particular was viewed as a mandatory year of drinking, described by several participants as the '*party year*' or '*the year that doesn't count*'. It was clear that students had been informed by older university peers that the grade attained in the first year would not influence their

overall degree classification. This information appeared to influence some participants' expectations that the first university year would bring about limited responsibilities and that students should make the most of the freedom to drink as drinking in the later years would decline as workload intensified.

Yeh people told me you go out hard in the first-year cause it doesn't count it's just like a time to settle in, so I thought like ohh we can go out all the time and drink as much as we want in first year and then it would ease up in the other years as the work gets harder (P9)

I think that first year of uni is sort of something to remember, you know just the year of having a great time and meeting new people and getting drunk. I don't care about the first year as yeh it doesn't count (P10)

(Interview 5)

6.4.6 Theme VI: A sense of belonging

One of the central themes concerning the transition from home to university was the importance of belonging for new students. Across the sample, conforming to the situated norms of drinking at university was key to fitting in with new peer groups and important in developing the identity of becoming a 'student'. For many, alcohol aided the transition to university by enabling the formation of new peer relationships and strengthening friendships.

6.4.6.1 Alcohol aids the transition to university

As has been previously described in the earlier themes, most students arrived at university with some level of anxiety, mostly relating to the formation of new social networks. Overwhelmingly, these anxieties acted as a driver for individual alcohol use, with alcohol being utilised by drinkers to create 'liquid courage' used to ease socialisation around unfamiliar peers. Differences were noted across the narratives, with non-drinkers more likely to report alcohol as being less important in peer development.

The first thing you buy in freshers is probably alcohol, so you can get absolutely annihilated cause everyone is like feeling uncomfortable and not confident, so I think the first thing you do is buy alcohol just to fit in with everyone (P1, Interview 3)

'Cause it was already awkward and then we started drinking, like I drank a lot 'cause I was so nervous (laughter) (P16, Interview 18)

Many of the drinkers used alcohol to gain confidence and reduce inhibitions, which made students feel more comfortable in their new social situation. Others used alcohol as a means of coping with the stress of forming new friends and leaving behind peers and family. For these students, alcohol helped to mask the initial pressures associated with making friends. Without alcohol, some students described themselves as being subdued and unable to interact with others, suggesting that they could not ‘*act themselves*’ without the help of alcohol.

I turned to alcohol most of all ‘cause I could be myself, I felt when I wasn’t drunk I couldn’t be myself, it gave me confidence to talk to people (P5, Interview 3)

For me it helped relieve a bit of stress, you are just constantly under the stress of making new friends, it’s a whole new place, whole new city, I think it probably helped to sort of ease the stress off and forget about it for a night (P12, Interview 6)

In the initial weeks of university, alcohol appeared to form the basis of many students’ friendships. After a night of drinking, alcohol would often be the dominant topic of conversation, where students would recite shared drunken experiences of the night before as a source of entertainment. Social media also provided a platform for students to capture, recite and communicate their drunken stories with their peers. Within these discussions, sharing drunken stories created social exclusion for those who missed out on a night of drinking. The drinking experiences students shared played a key role in binding new friendships and creating camaraderie. In the quote cited below, both male students suggest that their relationship would be somewhat different without alcohol as they would not have as much in common with each other.

You build a stronger relationship when you go out drinking together (P7)

‘Cause nine times out of ten we are either talking and laughing about what someone did when they were out drunk (P8)

If someone missed out on those things they would feel left out (P7)

(Interview 4)

If we didn’t drink during Freshers’ week... I think that is probably the only reason we spent so much time with together because we had something talk about the next day, cause we didn’t know each other properly so we just shared funny drunk stories (P14, Interview 7)

6.4.6.2 Conforming to the norm

As previously illustrated in Theme I, presentations of alcohol which locate it centrally within student life act to shape students' drinking behaviour. Upon arriving at university, those who drink describe how they conformed to the societal pressures to drink because it was something they felt was expected of them and would ultimately lead to inclusion *'I think like there is a lot of pressure to fit in with university life, like it is expected that you will be going out drinking all the time and you want to fit in with that so you just do it'* (P2, interview 1). Further to this, assertions suggest that alcohol plays a vital role in creating and establishing individuals' new identity as a student *'I think drinking comes with the stereotype of being a student, so I think a lot of people drink to live up to that stereotype'* (P12, Interview 6).

We are students we go out more cause it's the thing 'cause that is what students are known for, you're supposed to do it, so I think it's like living up to that (P3)

Like if you were to say to someone that like oh I don't go out [drinking] they would be like oh aren't you a student (...) you are supposed to go out (P4)

(Interview 2)

The commonality of drinking at university was further highlighted across the narratives by the fact that most individuals, specifically drinkers, were not aware of or did not mix with individuals that abstain from alcohol *'I don't think I have come across anyone that have said they don't drink yet'* (P14, Interview 7). This was contradicted by non-and light drinking participants who stated that they were surprised at the number of students who did not drink at university *'I was actually surprised at how a lot of the people I had met don't do it [drink alcohol], 'cause I thought if I came to uni I would be one of the few people who didn't drink, but I found it is only like forty percent of the people who go mad'* (P20, Interview 10).

We see in the extract below, participants argued that transgressing from the norms of drinking at university is seen to be *'boring'* and *'not as socially acceptable'* as drinking. This view was found to

resonate across drinkers' narratives, with an overwhelming majority voicing unfavourable opinions of non-drinking peers and describing non-drinkers as 'weird', 'different' and 'not normal'.

No matter where you are from, what you do, if you are going to uni you are going to be drinking (P22)

It is very, very rare you will find someone who doesn't drink, actually I know one girl who doesn't go out (P21)

But she is an odd one, she is very different from everyone isn't she (P22)

(Interview 11)

Most of those who drank admitted that they had experienced some form of pressure to drink whilst being at university. For example, participants described the continuous invitations to drink and persistent scrutiny they received from peers after making the decision not to go out drinking. Others confessed that after initially choosing not to drink, observing peers preparing for a night of drinking often led to them to get 'carried along with everyone else'.

I think this environment does encourage drinking a lot more cause nine out of ten times I will be say I am not going out and my friends will literally be like no you have to, you've got to, you will end up going out, it's so much easier, you want to stay friends at the end of the day (P19, Interview 10)

I go out with mainly my flatmates cause it's I feel like you are influenced more if you see someone getting ready and they are starting to drink you think or right I might as well go out (P2, Interview 1)

Not all participants agreed that there is pressure to drink at university. In the extract below, a non-drinker offers a different perspective, in which she states that she has never been challenged by peers to drink and puts this down to her tenacious attitude towards not drinking.

I don't feel pressure at all, and I think others get so swept up with it and it becomes so unhealthy because they are just not used to it, I think because I am just like no I am not drinking people don't bother me as I have made up my mind (P20, Interview 10)

6.5 DISCUSSION

The aim of this study was to understand first-year first time students' perceptions of and experiences with alcohol as well as gain insight into the factors that are associated with the trajectory of drinking across the transition from home to university. The findings indicate that new students arrive at university with pre-conceived perceptions of normative student drinking rituals and knowledge of how alcohol can be utilised to assist with adjusting to university life. The main finding, which resonates with results documented in Chapter 5 (Study II) was that upon entering university most students alter their drinking behaviour consuming more alcohol more frequently and engage in more high-risk drinking behaviours, such as preloading. The findings from this study help to develop an underdeveloped evidence base by giving greater insight into the possible influences of behavioural change during the transition to university. These findings can be used to inform policy and practice, to prevent excessive drinking in UK universities and reduce harm.

6.5.1 Pre-existing perceptions and fears

One important aspect of the study was students' preconceptions of alcohol use at university. Students perceived drinking at university to be a normalised and socially expected part of student life, anticipating that alcohol would aid new relationships and help overcome social anxiety. Homogeneity across discussions for gender, drinker status and age illustrate the strength of these normative presentations across the sample. Expectations and perceptions of a heavy student drinking culture have been documented elsewhere. Narratives collected from 160 UK students showed that many undergraduates view excessive drinking at university as the norm and adhere to the stereotypical student drinker image presented to them (Piacentini & Banister, 2006).

Among students in my study, the internalisation of cultural norms and the expected practice of drinking at university played a critical role in shaping individuals' consumption patterns but also rationalised and excused excessive drinking behaviour (Gusfield, 1987; Scanlon et al., 2007). This concept supports constructs from the social norms theory in which those who view drinking as a normative aspect of the student lifestyle alter their behaviour in an attempt to 'fit in' with the collective student identity. Social norms have consistently been linked to increased consumption and risky drinking behaviour within the

student-based literature (see Chapter 2 for review) (Baer, Stacy & Larimer, 1991; Garnett et al., 2015; McAlaney & McMahon, 2007; Perkins & Berkowitz, 1986; Perkins, 2002). The results from my study highlight the significance of pre-arrival alcohol expectations and demonstrate the impact that widely held beliefs have on shaping ideology and influencing drinking behaviour. Breaking down these norms present real challenges for those trying to challenge excessive drinking in universities.

Alongside pre-arrival perceptions of a heavy student drinking culture, students accentuated their concerns regarding the move to university. The transition to university was identified as a highly pressurised time, which was accompanied by increased anxiety and new psychological and social challenges. The primary concern for most respondents was related to rapid social integration with new university peer groups. Across discussions, alcohol was prioritised as a means of overcoming these anxieties and assisting with the development and maintenance of new relationships. The concerns experienced by study participants chime with transitioning students' anxieties documented elsewhere (Brown, 2016). For example, in the most recent Annual Student Experience Survey (2017), conducted in the UK on over 1117 first year and university applicants, almost 9 out of 10 (87%) first year students were concerned or found it difficult to cope with social aspects of university life.

In light of the current study findings which illustrate high levels of pre-arrival anxiety in students and the use of alcohol as a means to reduce this, universities need to respond to the risks that are associated with the transition to university. Institutions need to provide structured support for first time students transitioning to university to ensure that they make friends, feel supported and settle into their new environment without the need to rely on alcohol (Mobach & Maskell, 2011).

6.5.2 Changing drinking habits

Upon entering university, the knowledge and expectations of a heavy student drinking culture obtained prior to arrival were confirmed through intensive alcohol promotions, new social drinking opportunities and excessive drinking norms which characterise the first few weeks of university. Freshers' week is renowned across British universities as a period which aims to help new students acclimatise to their new environment and is characterised by excessive student drinking (Riordan, Scarf & Conner, 2015). For example, in the preceding Study (II) (Chapter 5) conducted with a cohort of first-year halls of

residence students (N=221), the average number of units consumed during the two-week Freshers' period was 63 units. For incoming students, Freshers' period is the first experience they have of university life. Entering this heavy drinking landscape reinforces pre-institutionalised expectations of alcohol use and defines the university environment as one which permits and encourages heavy drinking norms (Brown, 2016). Previous work by Fuller et al (2017) measured the content in marketing materials provided to students at a UK university freshers' fair. They found that of the student led societies advertising social events, 62% took place in a drinking venue or referred to drinking (N = 335) and only four explicitly promoted alcohol-free events. In addition, promotional drinks offers and alcohol branding from local businesses featured heavily at the event (N=81). It is evident that there is a need to challenge and reduce the normative presentations of heavy drinking which are associated with freshers. University approaches should attempt to advertise other aspects of life on campus during the weeks running up to the start of term and during Freshers' period. For example, showing different ways in which students can use their leisure time that does not involve the use of alcohol.

For the vast majority of study participants alcohol became more of a frequent feature in their lives at university than prior to with many citing increases in drinking levels and frequency and the adoption of new risky drinking behaviours such as preloading and drinking games. Most of the students had drunk prior to university, however drinking tended to occur on a monthly basis in local pubs and at friends' houses. Generally, drinking at university was practiced weekly, with students consuming alcohol within their student accommodation before heading into the nightlife environment. Quantitative studies conducted on US college students have documented a similar trajectory of drinking (Baer, Kivlahan & Marlatt, 1995; LaBrie, Lamb & Pederson, 2009; Sher & Rutledge, 2007; White et al., 2006). However, to my knowledge the current study is among the first to document changing drinking habits upon entry into university by qualitative means. In contrast to increasing student drinking behaviours reported in my study, recent population data reports that the prevalence of alcohol consumption has declined markedly among UK youth populations over the last decade (ONS, 2018). Research is yet to explore the sociodemographic patterns and associations of this downward trend of youth drinking (Oldham et al., 2018), however, it may be that university students are a sociodemographic group who are not

reducing their alcohol consumption. There is an investigation currently being undertaken into the declining trends of youth drinking and the driving force behind this pattern of drinking (Oldham et al., 2018).

Adding to the quantitative evidence base, my study also found that those who had little experience of drinking prior to university used others' drinking as a marker of how much they should consume and consequently experienced more perceived alcohol harms. This concept reflects principles of the modelling theory. According to Bandura (1977, 1986) behaviour is learnt through the observation and interaction of others within a social context, therefore those who model their behaviour on heavy drinking peers are more likely to consume higher levels of alcohol and experience associated harms. Learning through experience sees university act as a learning space in which individuals experiment with alcohol and learn about their personal boundaries and drinking limits in a relatively autonomous environment. It may be that students entering university with limited drinking experience may be a high-risk group and therefore a target for alcohol intervention as evidence indicates that heavy patterns of drinking established in the first year of university continue throughout students' life course and beyond into later life (Bewick et al., 2008a; Mathurin & Deltenre, 2009; Merrill, 2016). The move to university presents a unique opportunity for university-based interventions which aim to tackle high risk drinking in the early stages of development (Borsari, Murphy & Barnett, 2007).

6.5.3 University drinking rituals

One of the aims of the study was to explore students' experiences with alcohol as they transition from home to university. The students' anecdotes of drinking at university infer that although drinking experiences vary from one individual to another, there appears to be common drinking rituals practiced on a student night out which are consistent across the sample. Recently there has been a call for research which acknowledges and explores the components of students' drinking in detail in order to provide a comprehensive understanding of health behaviours and the context in which they are carried out (Davies, Law & Hennelly, 2018).

Current findings in relation to the centrality of alcohol on a student night out echo those of many in the field (Conroy & de Visser, 2014; Davies, Law & Hennelly, 2018; Piacentini & Banister, 2006; Wright, 2017). The importance of alcohol on a night out for student drinkers represents the visible culture of intoxication within the late-modern UK context of youth drinking (Bailey, Griffin, & Shankar, 2015; Measham & Brain, 2005), in which the purpose of drinking for some young adults is to get excessively drunk (Seaman & Ikegwonu, 2010). Current anti-drunkenness campaigns negatively portray youth drunkenness (Plant & Plant, 2006), however if the purpose of drinking at university is to get drunk it is likely that these campaigns are counterproductive, and messages of restraint may have limited impact. When preparing for a night of drinking students used Facebook and other media platforms as a communicative tool. These forums were frequently used to share alcohol-related content such as upcoming events and to encourage others to join in group drinking. Social networking sites also provided a means of sharing, creating memories and reliving drinking experiences with peers (Atkinson et al., 2011; Atkinson et al., 2015). Social media is widely utilised by university students, with indications that 94% of undergraduates use Facebook regularly (Ellison et al., 2007). Given the importance of social networking sites young people, media platforms could be utilised to promote alcohol-related health messaging across the student population. Designing other ways to create, share and relive memories with friends that do not centre around drinking need to be established. This approach however is unlikely to be effective whilst health messaging is countered by online alcohol advertising (Atkinson et al., 2011).

Preloading in particular was a planned and a culturally embedded feature of students' peer group drinking occasions. The commonality of preloading at university illustrates a cultural shift over recent years which has seen the growth of at home rather than public drinking (Hughes et al., 2008; Institute of Alcohol Studies, 2010 & Jayne, Valentine & Holloway, 2011). Evidence indicates increased levels of preloading in student populations with as many as 90% of drinkers reporting home consumption before entering the nightlife environment (Quigg, Hughes & Bellis, 2013), which is much greater than the reports of regular nightlife users reported elsewhere (58% preloaded prior to arriving in the NTE) (Hughes et al., 2008). One of the main reasons given for shifts in consumption is the cheaper price of

alcohol in off-license premises. For example, survey data indicates that alcohol prices in licensed premises are typically around three times higher than those in the off-premise trade (Rabinovich et al., 2009).

The practice of preloading at university often involved ritualised games which test players' drinking speed and endurance. As other research has confirmed, drinking games are inherently risky with many including mixing alcoholic drinks and racing or nominating others to finish their drink quickly (Borsari, 2004; Haas, Smith & Kagan, 2013; Kenney, Hummer & LaBrie, 2010; Zamboanga et al., 2010). For the students in my study, preloading and drinking games were important drinking strategies used to minimise costs spent at on-licensed venues and used to create inebriation before entering the night-time drinking environment (Atkinson & Sumnall, 2017; Barton & Husk, 2014; Caudwell & Hagger, 2014; Foster & Ferguson, 2013; Wells, Graham & Purcell, 2009). The social value of preloading was also highlighted, with students referring to its function in creating group cohesion, reducing inhibitions and creating fun in private spaces among unfamiliar peers, which was especially important in the initial weeks of university where acquisition of peer groups was valued (Atkinson & Sumnall, 2017; McCreanor et al., 2016; Zamboanga et al., 2010). Preloading not only represents less regulated consumption than measured on-licence alcohol purchases it is also correlated with more experiences of adverse alcohol-related consequences (Barton & Husk, 2012; Foster & Ferguson, 2013; Hughes et al., 2008; LaBrie et al., 2011; Read et al. 2010). Following at home drinking practices, students attended alcohol fuelled events within the night-time drinking environment. These events are tailored to student patrons and include appealing alcohol products and discounted drinks. Popular student nights and locations featured frequently across the narratives, '*Level Wednesday's*' and '*Quids in at Heebies*' were among the most common.

Lastly, those students who were involved in society-led sport groups cited heavy and exclusive drinking behaviours amongst their teams. Sport teams have a reputation for excessive drinking, with past work reporting higher drinking levels among sport team members compared to non-participants (Heather et al., 2011). In order to disrupt the transmission of drinking practices for new student members, it may be important to identify those students who play a key role in setting the expectation to drink. Key

figures such as sports or social society leaders could be recruited as mentors to newer students to offer support and encourage lighter drinking practices. Further, initiations were found to be rife at university despite them being banned. Initiations which are held by society-led groups welcome new members to the group by putting them through difficult challenges, including excessive drinking in order to confirm membership. In 2016 excessive consumption of alcohol during an initiation event led to the death of a university student in the North East of England (BBC, 2018). Universities need to do more to make students aware of the consequences associated with the high-risk drinking and place sanctions on those organising such events.

In light of the study findings it is clear that a number of key elements form the basis to a student night out, such as drinking preparations, drinking styles, beverage choices and popular drinking venues and events. Greater understanding of the nuances, routines, and contexts of students' drinking at university allow researchers to understand that not all drinking practices are the same and therefore involve different motivations and behaviours. The implications of understanding drinking in this way is that rather than targeting individual cognitions, tailored health promotion efforts can be developed to disrupt key components of drinking such as the materials, location and meaning (Davies, Law & Hennelly, 2018). Such efforts could include organising alcohol-free activities, targeting popular student events or disrupting at home drinking practices (Blue et al., 2016; Davies, Law & Hennelly, 2018; Supski et al., 2017).

6.5.4 The university drinking environment

Data from the current study indicates that first year students transition from the family home where alcohol is less readily available or restricted into an alcohol-intense environment in which cheap alcohol, increased drinking opportunities and multiple drinking settings combine to create a dominant alcohol environment which encourages excessive consumption behaviours.

Unlike the geographical boundaries of the family home, proximity of student accommodation to nightlife drinking venues and off-licenced outlets gave first time students new drinking independence.

Students no longer had to rely on parents or taxis for transportation, thus enabling night-time drinking practices to go on for longer. Further, the boundaries of student hall accommodation were found to be more flexible than other accommodation types, with the open plan structure of hall accommodation providing a vital social setting conducive to preloading and communal drinking. The current findings echo past international studies which show that the student shared hall settings are associated with higher consumption levels when compared to other accommodation types (Kypri et al., 2002; Lorant et al., 2013; Perkins, 2002; Thombs et al., 2009; Ward & Gryczynski, 2009). It is likely that the lack of monitoring and the physical layout of halls of residence enables individuals to encounter heavier drinkers which could influence excessive health behaviours (Bandura, 1977, 1986). In an attempt to create a safe, healthy and inclusive campus setting several UK universities are currently trialling alcohol-free residential halls, with sanctions given for those who consume alcohol (St Andrews University, University of Chester, University of Bath and University of Bristol). It is argued however that these efforts fail to disrupt the culture of heavy drinking in student halls as they isolate non-drinkers from the rest of the student population and aid perceptions of a negative non-drinker prototype. It may be more appropriate to focus on the role of those who manage university hall accommodation instead.

Throughout the discourse frequent reference was made to the intensive promotions of alcohol at university. For the majority, the marketisation and branding of the student social experience began before students arrived on campus (Wright, 2017). Individuals spoke of receiving Freshers' period related promotional material via email, through social media platforms and in university prospectuses prior to their arrival. Some of this material signposted students to the SU web page where tickets for freshers' wristbands were on sale. The SU is a profit-driven organisation which is partnered with local drinking venues and club promoters and therefore benefits from alcohol sales (Brown, 2016). This partnership creates a paradoxical situation in which the SU promotes healthy behaviour, such as sensible drinking alongside promoting heavily discounted alcohol events. Researchers argue that when competing economic and health interests are observed, economic drivers have always won (Jayne, Valentine & Holloway, 2008; Nicholls, 2009).

Key retailers benefit from the geographic advantage of students' halls of residence. Once students arrived on campus, licensed venues appeared to use targeted marketing techniques such as advertising in residence halls, Freshers' fairs and social media platforms to encourage student patrons to attend club events and purchase heavily discounted alcohol. Thus, providing first year students with new and exciting drinking opportunities. A further concern was that there appears to be a lack of credible alternatives to drinking, meaning the participants often drank out of boredom. Davies and colleagues (2018:14) suggest that more research is necessary to determine the types of events or social occasions which could act as a credible alternative to drinking and not be viewed as '*uncool*'.

The environment in which young people consume alcohol has changed significantly over the years. There has been considerable growth in the number of retailers supplying alcohol and a change in the products that are marketed with pricing and promotion geared towards rapid consumption of alcohol (Measham, 2008). This ubiquitous marketing of cheap alcohol to younger drinkers and flourishing night-time economy commodifies the pursuit of drunkenness through acceptance and reinforcement of heavy consumption behaviours (Griffin et al., 2009, Hastings et al., 2005 & Seaman & Ikegwuonu, 2010). The dominant offer of alcohol at university suggests that alcohol interventions must move away from an individualised responsibility approach to one that recognises the role that supermarkets and off-licences surrounding university campuses have on the student drinking culture. As others have purported it is important that student drinking is understood in the wider context in which off-sale alcohol is readily accessible and affordable to young people, extended closing times of bars and clubs has instigated preloading and later entry to nightlife spaces and the pleasures and social benefits of drinking drive consumption (Atkinson & Sumnall, 2017; Barton & Husk, 2012 & Valentine et al., 2007).

6.5.5 Freedom to drink

University life was ultimately viewed as a time in which young people have both the freedom and flexibility to drink. As students make the move from home to university they transition from the relatively controlled setting of further education and the family home, to an autonomous environment in which they have greater independence (Brown, 2016; Wright, 2017). Those who were restricted in

their drinking practices prior to university used the initial weeks of university as a time of exploration where personal drinking boundaries were tested and greater risks were taken.

Study participants considered the student life as transient in which for the first and only time in their lives they have few responsibilities and greater freedom to drink. Consistent with past research, there was a sense that participants were living up to the student image that had been presented to them; where alcohol provided enjoyment and fun before the responsibilities of life after university began (O'Malley, 2005; Maggs & Schlenberg, 2005 & Piacentini & Banister, 2009). Much of the research around the transition to university positions university as an extension of adolescence. These years are typically a time of change and exploration in which individuals are neither an adolescent nor do they have the responsibilities and expectations that are normative to adulthood. Such concepts reflect the theory of Emerging Adulthood (Arnett, 2000). The key challenge for policy makers seeking to encourage behavioural change is that students are of an age where they are capable of making their own decisions and for the first time can consume alcohol legally, regulating behaviour is therefore complex. In past studies, students and staff responded negatively to university policies of regulation arguing that such approaches go against students' independence and freedom to drink (Brown, 2016; Larsen et al., 2016). Encouraging students to be responsible for their own drinking behaviour by reducing risk and harm may therefore be a more appropriate response.

Narratives around the freedom to drink highlight that universities themselves have some responsibility in altering the perceptions of a permissive and accepting campus drinking culture. Most students provided anecdotes of missing class, increased flexibility and free time to drink, and perceived permissive attitudes of academic and residential staff. McArthur and colleagues (2017) suggest that 'accepting' alcohol contexts influence young people's attitudes and dispositions towards perceived benefits of drinking and the affirmation of their behaviour, therefore contributing to normalised alcohol use. If institutions are to challenge the normalised culture of drinking, they must take a university wide approach which includes the involvement of staff, the SU and support services to ensure consistency.

Further, more alcohol-free events and extracurricular activities should be developed as this will fill students' free time with social activities which are not centred around drinking.

6.5.6 Sense of belonging

Students highlighted their concern around the formation of relationships with new peers and successful integration into social groups, anticipating that alcohol would aid new relationships and help overcome social anxiety. The findings from the current study support those of others which have similarly demonstrated the link between alcohol use and socialising and the associations that alcohol has with lowering inhibitions, building confidence, creating enjoyment and group bonding (De Visser et al., 2013; MacArther et al., 2017; Niland et al., 2013; Percy et al., 2011 & Seaman & Ikegwuonu, 2010). The benefits of alcohol that study participants experienced during the transition from home to university suggests that drinking is reinforced through positive outcomes and is unlikely to change significantly unless alternative means of socialising are available.

The desire to drink at university was also partly driven by social conformity and a view that '*everyone one else is doing it*'. Applying concepts of Bourdieu's theory of habitus, field and capital (1984), in order to successfully adapt to university life, one must 'fit in' with a social group (Scott et al., 2017). To achieve acceptance, individuals internalise and act out cultural and social norms which are associated with the field. Maintaining the idea that drinking at university is a habitual expectation and university students are supposed to drink as part of their new student role is therefore likely to influence incoming students' drinking behaviour. Bourdieu contends that in conforming to these norms, individuals feel that they will gain high levels of social capital and peer recognition. Therefore, those who misperceive excessive alcohol use as 'typical' student behaviour are more likely to act in a way that represents the perceived norm in an attempt to gain acceptance from new social peers (Baer, Stacy & Larimer, 1991; Garnett et al., 2015; McAlaney & McMahon, 2007; Perkins & Berkowitz 1986; Perkins, 2002). Deviations from the norm, such as abstaining from alcohol puts social capital at risk which can lead to social disassociation and exclusion (Conroy, 2014). This concept can be seen across the views of drinkers in the current study. Many drinkers held negative stereotypical impressions of non-drinkers, describing abstention as '*boring*' and '*different*'. Two recent studies have shown that negative

perceptions of non-drinkers predict increased levels of alcohol consumption among students (Regan & Morrison, 2011; Zimmermann & Sieverding, 2010). One interventional approach might seek to challenge students' prejudicial beliefs about non-drinkers as being less sociable than students who regularly drink.

Peers then play a vital role in creating and reaffirming drinking norms at university as they provide students with role models and validations of behaviour (Bandura, 1977, 1986). Current policy approaches fail to recognise the social motivations underpinning alcohol consumption in peer groups. The benefits of drinking such as enjoyment, togetherness and the sense of social identity are used to appeal to young drinkers across alcohol advertising however these social elements are often missed from alcohol prevention campaigns. There is a need to disrupt the meaning of drinking as a social practice and move beyond a focus on the harms of drinking to incorporate recognition of the social and pleasurable nature of drinking. Universities need to offer alternate occasions for socialising which do not involve alcohol. Alongside heavy drinking participants, two students stated that they did not drink alcohol at university. Surprisingly, these students did not feel pressure to conform to heavy drinking norms, stating that once their mind was made up no one contested their decision not to drink. From a health promotion perspective, it may be of particular interest to further understand the social experiences of non-drinkers at university given that non-drinkers have experience in managing expectations to drink and socialise without using alcohol. One interventional approach might seek to highlight the increasing numbers of non-drinkers in the youth population (ONS, 2016) however, further research into the social experiences and motives behind abstention is required.

6.6 STRENGTHS AND LIMITATIONS

This study presents findings from a paired interview study which aimed to contextualise the quantitative findings (Study II) presented in Chapter 5 by providing understanding and meaning to students' drinking experiences across the transition from home to university. The research confirms that expectations of a heavy student drinking culture are confirmed through intensive alcohol promotions and excessive drinking norms during freshers. Further, students increase their drinking levels and frequency and adopt new risky drinking behaviours such as preloading and drinking games upon entry

into university. Through gaining new insight into first year students' perceptions and drinking behaviours across the transition to university it is anticipated that findings will be utilised locally to help inform and develop alcohol strategies, which can be applied to students' drinking in Liverpool (see Chapter 7 for intervention points).

A further strength of this research was the paired interview approach adopted which produced multiple perspectives and experiences of the university drinking environment. One feature of paired interviewing is the familiarity participants have with each other's experiences. The relationship between peers shaped an informal context which created open and honest discussion and meant that participants challenged and built on each other's answers, producing enriched responses to questions. There is however a possibility of peer influence when conducting paired interviews with peers (Peterson & Barron, 2007). Conforming to members within the group could have led to findings that portray a relatively homogenous view towards the student drinking culture. To reduce the impacts of peer influence I encouraged quieter members to talk by directing questions to try and produce results that were reflective of the pair.

Despite the strengths of this study, there are several limitations which must be acknowledged. An opportunistic sampling method was adopted, which recruited first year students who attended a single university campus in the North West of England. This means that those recruited may not necessarily represent the diverse local student population in terms of ethnicity. Other studies have shown that other groups of students, such as international students (Thurnell-Read, Brown & Long, 2018) have very different experiences of drinking at university. Therefore, the views recorded in this study may not be representative of those that do not fit the mainstream stereotype of students in the UK. However, it must be noted that the emphasis of this study was to gain insight into a relatively unstudied subject area, providing key information to aid the development of local interventions to reduce alcohol use and minimise the harms of drinking within HE settings. Therefore, a small but in-depth study was considered to be appropriate.

Although the study was inclusive of non-drinking students, there were only a handful of students (N=2) who stated that they abstained from alcohol. Surprisingly non-drinking students in this study did not

feel any pressure to drink whilst at university, stating that once their mind was made up no one contested their decision not to drink. These students also viewed alcohol as unimportant in peer development. This acknowledged, if I were to repeat the study I would try and recruit more non- drinking students. It would of particular interest to understand the social experiences of non-drinkers at university given that these individuals have experience in managing pressures to drink and socialise without using alcohol. Through understanding how not drinking within an alcohol dominant environment is achieved might help policy officials challenge alcohol as an essential ingredient of enjoyable and sociable interactions among young people

Furthermore, social desirability is a common issue in research, especially when answering socially sensitive questions such as alcohol consumption (Morleo, Cook & Bellis, 2011). Several measures were carried out in an attempt to reduce high levels of bias. For example, paired interviews were used as an approach to reduce apprehension by creating a better balance of relationship between the interviewer and participants (Lohm, 2011). Secondly, transcripts were consistently reviewed to ensure that I had represented the views of participants during analysis. The coding framework was then discussed at several points in time with my supervisor who has expertise in qualitative methodology, to ensure consistent application throughout the data.

6.7 CONCLUSION

Overall, the findings identify the transition to university as a high-risk period for excessive drinking. The findings indicate that new students arrive at university with pre-conceived perceptions of a heavy student drinking culture. The internalisation of these norms played a critical role in shaping individuals' consumption patterns whilst at university. During the transitional process many students experienced stress and anxiety related to forming new peer groups and integrating successfully into university life. Alcohol was used by participants as a tool to overcome these pressures and to ease and speed up group bonding. Upon entering university, the knowledge and expectations of a heavy student drinking culture obtained prior to arrival were then confirmed through intensive alcohol promotions, new social drinking opportunities and excessive drinking norms which characterise the first few weeks of university.

The study has provided understanding into the external and internal factors which contribute to the maintenance of excessive student drinking norms, such as campus wide acceptance of drinking, affordable alcohol and conducive living environments. It is therefore argued that if universities are to successfully challenge the norms of students' drinking efforts, these must be made across multiple levels, with policy implementing pricing controls in conjunction with institutional responses focusing on reducing harms and acceptance of use.

6.8 STUDY HIGHLIGHTS

- New students arrive at university with pre-conceived perceptions of heavy student drinking culture and knowledge of how alcohol can be utilised to assist with adjusting to university life.
- Expectations of a heavy student drinking culture are confirmed through intensive alcohol promotions and excessive drinking norms during Freshers' period.
- Many students experienced stress related to forming new peer groups and integrating successfully into university life. Alcohol was used by these students as a tool to overcome social anxieties.
- Students increased their drinking levels and frequency and adopted new risky drinking behaviours such as preloading and drinking games upon entry into university.
- Alcohol was at the centre of most social occasions at university. Drinking together strengthened new friendships through creating memories and shared experiences.
- Multi external and internal factors contribute to the maintenance of excessive student drinking norms, such as campus wide acceptance of drinking, affordable alcohol and conducive living environments.

CHAPTER 7: MIXED METHODS SYNTHESIS OF FINDINGS AND DISCUSSION

7.1 INTRODUCTION

This thesis had the overarching aim to explore the perceptions, prevalence and factors associated with alcohol use as well as related harms during the move from home to university. This discussion was undertaken by adapting Farmer et al's (2006) integration approach which involved merging themes from both the quantitative (Study II) and qualitative findings (Studies I and III) simultaneously on a theme-by-theme basis. The chapter provides a summary of the findings of the thesis and explores how these findings answered the research questions. The novel contribution of this thesis and the strengths and limitations of the research are then summarised and opportunities for further investigation and implications of findings for policy and practice are identified. The chapter closes with overall conclusions.

7.2 TRIANGULATION OF RESULTS

Triangulation is a methodological approach used to integrate multiple forms of evidence to answer a research question (Heale & Forbes, 2013). Triangulation works on the basis that the combination of findings provides a more comprehensive picture of the results than either study could do alone (Barbour, 1999). Through integrating results from individual studies, triangulation enhances the validity of the research by increasing the likelihood that the findings and interpretations will be found credible and dependable (Lincoln & Guba, 1985).

Although regarded as a means of adding depth and rigour to a research inquiry, there are several criticisms of the use of triangulation in research. When convergent findings from across the strands of research are found there must be caution in interpretation since it may be that each of the data is flawed rather than there is true data convergence (Heale & Forbes, 2013). It has also been argued that researchers consistently fail to provide methodological detail and transparency when integrating methods with many reporting heavily on what they find and not clearly articulating the triangulation procedures they undertook (Farmer et al., 2006). Across the literature there is little direction regarding the procedure of the triangulation process and how this technique should be applied. One of the most detailed description is outlined in Farmer et al (2006). Although initially developed for multiple

qualitative methods, the approach is relevant and has been used in mixed methods studies (O’Catahain, Murphy & Nicholl, 2010; Schölin, 2016). Within their paper, authors outline a triangulation protocol which requires researchers to first list the findings emerging from each component of a study on the same page and then consider where findings from each method agree (Agreement), offer complementary information on the same issue (Partial Agreement), or appear to contradict each other (Dissonance) (Farmer et al., 2006).

The triangulation of the three studies sought to explore the perceptions, prevalence and factors associated with alcohol use as well as related harms during the move from home to university (see 3.2). Each step of the protocol is described in Table 20.

Table 20. Triangulation protocol

Step	Activity
Sorting	Each individual study was revisited, findings were extracted to determine areas of content that overlapped with other strands as well as identify findings which only occurred in each individual study.
Convergence Coding	<p>Themes from each study were then mapped out in a matrix to explore the degree of convergence and explicit examples were provided. The data was coded in relation to:</p> <p>i) Agreement</p> <p>There is full agreement between the sets of results in terms of the theme’s meaning and the specific examples provided are the same.</p> <p>ii) Partial agreement</p> <p>There is agreement on one but not both components i.e. the meaning of themes is the same or the specific examples provided are the same.</p> <p>iii) Silence</p> <p>One set of results covers a theme which is silent across the other studies.</p> <p>iv) Dissonance</p> <p>There is disagreement between the sets of results on both elements of comparison (e.g. the meaning and specific examples provided are different).</p>
Convergence assessment	All the themes were then reviewed across the studies to provide an overall assessment of the level of convergence. For example, whether there were convergent findings across most of the themes identified or if the overall results were scattered.
Completeness assessment	Findings from across all three studies were assessed to enhance the completeness of the overall findings and identify key differences in coverage.

I extracted findings from each study, mapped these data and performed the analytical synthesis. In Farmer et al’s (2006) triangulation protocol an additional fifth and sixth step are included, titled “researcher comparison” and “feedback”. As I was the only researcher involved in the analysis these steps were not relevant and were therefore excluded from the matrix. Instead, two of my supervisors who have expertise in mixed methodology reviewed the overarching themes to ensure completeness.

The triangulation protocol I used follow those set out in steps 1–4 (Table 20). Firstly, findings were extracted to determine areas of content that overlapped with other strands and key themes were identified. Each theme was then described and examples of the key findings from across the studies

provided. Once all themes had been summarised in the matrix, I then grouped them into global themes and mapped them out with reference to the level of convergence across the studies (Table 21).

Table 21. Data triangulation matrix

Research aims	Main theme	Study I	Study II	Study III	Findings
What are students' pre-existing perceptions of the university student drinking culture and the role that alcohol plays during the transition into university?	Students develop pre-determined perceptions of a heavy student drinking culture prior to their arrival at university	◆	◆	◆	<p>◆ Study I: The prevailing view at both a group and individual level was that drinking at university is a normal behaviour carried out by the vast majority of students: “<i>everyone is doing it, it has just kind of become the norm</i>”.</p> <p>◆ Study II: A large proportion of the sample arrived at university with perceptions of a heavy student drinking culture. Of the entire sample, three-fifths (58%) presumed that all university students consume alcohol, a similar proportion (64%) agreed that drinking was an expected student behaviour.</p> <p>◆ Study III: Students entered university with knowledge around the norms of drinking and expectations around the uses of alcohol. The internalisation of cultural norms and the expected practice of drinking at university played a critical role in shaping individual’s consumption patterns at university.</p> <p>Convergence coding: Agreement</p>
	Negative perceptions of non-drinking students	◆	◆	◆	<p>◆ Study I: All groups felt that those who transgressed from the norms of drinking would miss out on shared social experiences and would therefore feel ‘<i>left out</i>’ and ‘<i>isolated</i>’ from the rest of the student population.</p> <p>Study II: Less than half of first year students agreed that students who do not go out drinking at university are not enjoying themselves (39% pre-university; 48% at university).</p> <p>◆ Study III: At university the majority of drinkers were not aware of or did not mix with individuals that abstain from alcohol. Participants argued that transgressing from the norms of drinking at university is ‘<i>boring</i>’, ‘<i>not as socially acceptable</i>’ and ‘<i>weird</i>’.</p> <p>Convergence coding: Partial Agreement</p>
	Influences which develop pre-arrival perceptions	◆	-	-	<p>◆ Study I: Several sources of information were found to play a role in shaping the cultural norms around alcohol and its use at university. These included universities themselves, the media, peers and family members and personal experiences.</p> <p>Convergence coding: Silence</p>
What are the drinking behaviours of students’	Alcohol consumption	◆	◆	◆	<p>◆ Study I: Nearly all students admitted that they planned to increase their alcohol unit intake at university, this view also resonated across those who abstained from alcohol.</p> <p>◆ Study II: Among those who drank at both reference points typical weekly median unit total increased by 15.5units (15.9 units prior to university; 31.4 units at university) and students drank on a more frequent basis.</p>

transitioning to university?	increases upon entry to university				<p>◆ Study III: For the vast majority of study participants alcohol became more of a frequent feature in their lives at university then prior to with many citing increases in drinking levels and frequency. Some students began increasing their alcohol usage prior to university in an attempt to build up individual tolerances.</p> <p>Convergence coding: Agreement</p>
	Engagement in risky drinking behaviours at university	◆	◆	◆	<p>◆ Study I: Drinking rituals such as preloading and drinking games were presumed to be common activities enacted by students. Such practices were thought to not only allow students to reach a desired state of intoxication whilst limiting the amount spent on on-sale alcohol but also help enhance intoxication for practical reasons (e.g. to overcome shyness, to boost confidence).</p> <p>◆ Study II: An uptake of risky drinking behaviours was observed upon entry to university among those who reported drinking at both reference points (preloading, prior to, 70%; at university, 89%; drinking with intent to get drunk, prior to, 64%; at university, 75% upon entering university).</p> <p>◆ Study III: Across all drinkers' narratives, preloading and drinking game engagement increased significantly upon entering university. These behaviours were important student drinking strategies used to minimise costs spent at on-licensed venues and create inebriation before entering the night-time drinking environment. The social value of preloading was also highlighted, with students referring to its function in creating group cohesion, reducing inhibitions and creating fun in private spaces among unfamiliar peers.</p> <p>Convergence coding: Partial Agreement</p>
	Freshers' is a period of excessive drinking	◆	◆	◆	<p>◆ Study I: Students across four of the groups presumed that during Freshers' period students go beyond the normal levels of drunkenness and past their own personal drinking limits. Narratives included words such as '<i>crazy</i>' and '<i>madness</i>' to describe the event.</p> <p>◆ Study II: Student drinkers reported high levels of alcohol intake (63 alcohol units) and frequent drinking (25% drank on 7 or 8 of the nights) during the 11-day Freshers' period.</p> <p>◆ Study III: For most, the main aim during Freshers' period was to socialise and get '<i>absolutely annihilated</i>'. Students viewed this event as the first opportunity they had to '<i>test their drinking limits</i>' in an open and autonomous environment where they had few restrictions and new-found independence.</p> <p>Convergence coding: Agreement</p>

<p>Are students' drinking behaviours before and during the transition to university related to health and wellbeing?</p>	<p>Negative health and social wellbeing is associated with heavy alcohol use at university</p>	<p>◆</p>	<p>◆</p>	<p>◆</p>	<p>◆ Study I: Considerations of negative harms related to drinking was not elicited in Study I. Prospective students associated drinking with sociability, relaxation and pleasure seeking which were thought to provide powerful incentives for university students to drink.</p> <p>◆ Study II: In adjusted analyses, the odds of experiencing alcohol-related harm were significantly greater for those who drank at very high levels at university and among those that increased their weekly unit intake. For example, high level consumers were 7.5 times more like to have unprotected sex (p=0.001) and 4.5 times more likely to have been involved in a fight (p=0.006) than low/moderate level drinkers. Further increases in weekly unit intake upon entering university was associated with a regular feeling of homesickness.</p> <p>◆ Study III: Although some students spoke of the negative associations that drinking had on their health and academic performance during Freshers' period, most participants spoke mainly of the positive impacts that drinking had on their social wellbeing. Alcohol was described as '<i>liquid courage</i>' used to ease socialisation around unfamiliar peers. Many of the drinkers used alcohol to gain confidence and reduce inhibitions, which made them feel more comfortable in social situations.</p> <p>Convergence coding: Dissonance</p>
	<p>Learning how to drink</p>	<p>-</p>	<p>-</p>	<p>◆</p>	<p>◆ Study III: Students who had minimal drinking experience upon entering university were unaware of their personal drinking boundaries and therefore used others' alcohol levels as a marker of how much they should consume. These students consequently experienced more perceived harms related to their drinking. Through experimenting and exploring drinking limits those with little drinking experience described how they learnt to '<i>handle</i>' their drink and developed knowledge of individual tolerances.</p> <p>Convergence coding: Silence</p>
<p>What factors are associated with the trajectory of students' drinking across the transition from home to university?</p>	<p>Life stage</p>	<p>◆</p>	<p>◆</p>	<p>◆</p>	<p>◆ Study I: Many of the participants viewed university as a period where drinking is legal, the responsibilities and pressures that accompany adulthood are absent and parental input is minimal. This led participants to describe university as the '<i>perfect opportunity</i>' to have fun and go out drinking.</p> <p>◆ Study II: A large proportion of students agreed that university is a time for experimentation with alcohol (60%, pre-university; 67%, at university).</p> <p>◆ Study III: Study participants considered the student life as transient in which for the first and only time in their lives they had few responsibilities and greater freedom to drink. Most of these students did not view their drinking as a problem, just an essential aspect of being a student.</p> <p>Convergence coding: Partial agreement</p>

Alcohol availability and pervasive marketing	◆	-	◆	<p>◆ Study I: Alcohol at university was presumed to be both cheap and freely available ‘<i>It’s everywhere [alcohol at university] isn’t it?</i>’ and student nightlife spaces were thought to offer more drinking opportunities compared to nightlife environments at home.</p> <p>◆ Study III: The marketisation of the student social experience began before students even arrived on campus through social media platforms and promotional material sent to students. On campus licensed venues appeared to use targeted marketing techniques such as advertising in residence halls, Freshers’ fairs and social media to encourage student patrons to attend club events and purchase heavily discounted alcohol.</p> <p>Convergence coding: Partial agreement</p>
Aspects of university perpetuates drinking	◆	-	◆	<p>Study I: Universities themselves played a key role in setting the expectation to drink through the promotional material they sent to incoming students. Prospective students felt that university is a permissive environment which lacks rules and regulations and that the social drinking environment created by the layout of student halls is conducive to heavy student drinking.</p> <p>Study III: Students felt that many aspects of university perpetuated drinking, such as the proximity of student accommodation to nightlife drinking venues, limited alternatives to drinking, social occasions centred around alcohol, the SU, sport groups, campus culture and more free time.</p> <p>Convergence coding: Partial Agreement</p>
The role of alcohol in the social processes of new students during the transition to university	◆	◆	◆	<p>◆ Study I: Prospective students believed that alcohol could be relied upon in the early stages of university, to reduce social discomfort, ‘<i>gain confidence</i>’ and strengthen new peer relationships, therefore enabling students to transition to university successfully.</p> <p>◆ Study II: Among all students, 62% agreed that alcohol was at the centre of socialising and 61% felt that alcohol had aided new friendships at university.</p> <p>◆ Study III: The primary concern for most respondents was related to rapid social integration with new university peer groups, across discussions alcohol was prioritised as a means of overcoming these anxieties and assisting with the development and maintenance of new relationships as well as enhancing social capital.</p> <p>Convergence coding: Agreement</p>

7.3 SYNTHESISED RESULTS

The triangulation process identified 12 themes from the individual studies, of which 10 were also present in at least two strands of the research. Four themes had complete agreement across the meaning and examples provided. Five themes had partial agreement, implying that some of the meaning was present in two or more of the studies but not necessarily that the findings represented the same meaning. One theme was dissonant meaning that the theme differed in the meaning or prominence across the data. Two themes were coded as silent, meaning that the theme was not present in any other strand.

What are students' pre-existing perceptions of the university student drinking culture and the role that alcohol plays during the transition into university?

The results were clear across all three studies that normative expectations of a heavy student drinking culture are formed prior to students' arrival on campus. Prior to arrival, excessive drinking was recognised as a key feature of the student experience with participants across both qualitative and quantitative strands anticipating that alcohol would aid new relationships and help to overcome social anxiety around integration.

The qualitative evidence detailed in Study I provided a comprehensive picture of prospective university students perceptions, expectations and knowledge of the university drinking culture. Narratives provided insight into the perceived role of alcohol as a facilitative tool for socialising and overcoming pre-arrival anxieties. One theme that emerged within Study I which was silent across the other studies was that wider cultural norms, institutions, peers, family members and personal experiences are all important sources which act to reinforce associations between alcohol and the student experience. Pre-institutional influences helped to create harmful stereotypes and ensure that alcohol expectations developed relatively homogeneously across the study population.

The survey (Study II) added to the qualitative evidence by reporting the prevalence and extent of these perceptions within a cohort of first year halls of residence students, concluding that a large majority of students enter university with some level of knowledge around what to expect at university. This study adds to qualitative findings in Study I by demonstrating that perceptions held by students strengthen

upon entering university (*Drinking excessively is an important aspect of the student culture*; prior to university 30%; at university, 68% ($p < 0.005$)) suggesting that the university context facilitates cultural norms of excessive drinking.

Findings from Study III extended the research in both Study I and Study II. Paired interview narratives illustrate that upon entering university, pre-existing perceptions and expectations of a heavy student drinking culture are confirmed through intensive alcohol promotions, new social drinking opportunities and excessive drinking norms which characterise the first few weeks of university. The internalisation of cultural and local norms played a critical role in shaping first year students' consumption patterns. The results from across the three studies highlight the significance of pre-arrival alcohol expectations and demonstrate the impact that widely held beliefs have on shaping ideology and influencing drinking behaviour.

It is clear that the university drinking culture presents a substantial obstacle to policy officials and universities interested in developing interventions to tackle alcohol use in UK undergraduates. Analysis across all three studies suggest that there is a need to target expectations and cultural presentations of student drinking before young people arrive on campus. As past research has shown, once heavy drinking norms become established, they become difficult to challenge (Livingstone, Young & Manstead, 2011). Hence, early intervention which challenges, re-frames and modifies beliefs at this developmental time-point are crucial. In order to disrupt student drinking expectations, it was important to identify how and why perceptions develop. My findings show that universities themselves play a key role in setting the expectation to drink through the promotional material they send to incoming students. For example, pre-admission information, SU events, Freshers' fairs and alcohol promotions espoused the view that drinking was an integral part of most social events and key to enjoying social occasions. Universities must attempt to promote other aspects of life on campus and alternative events that do not rely upon drinking during the build-up of students' transition to university (Davies, Law & Hennelly, 2018).

Qualitative evidence presented in Study I and III illustrates how cultural presentations of the student drinker identity can create negative connotations of those students who transgress from the norms of

drinking at university. Unfavourable opinions of non-drinking students such as '*boring*', '*not normal*' and '*different*' highlight the social challenges facing those who choose to abstain from alcohol and give insight into how peer scrutiny relating to non-drinking could manifest. Study II adds to our understanding by indicating the extent of such views. Results found that nearly half (48%) of first year halls of residence presumed that those who do not go out drinking are not enjoying themselves.

Based on the negative views that participants held of non-drinking students across the three studies, universities have some responsibility in breaking the social norms around not drinking at university. One interventional approach might seek to challenge students' prejudicial beliefs about non-drinkers as being less sociable than students who regularly drink. Alternatively, promotion of the positive experiences that students have when attending non-alcohol focused events and making non-alcoholic drinks on a night out more appealing to students by ensuring that non-alcohol drinks are a cheaper and a readily available alternative to alcohol may help to challenge these norms. As LJMU were one of the partnering universities involved in the Alcohol Impact they have gone some way to promote non-alcohol events around the university's campus. The results from this study however suggest that efforts may have gone unnoticed by new students. Further work is needed to determine the types of events or social occasions that could meet these criteria, especially given that previous attempts to change the excessive drinking culture have ultimately not been successful (NUS, 2017). One event which has received media attention of late is 'Sober-raving'. These events are held in nightclubs in a morning and have all the elements of traditional clubbing (other than alcohol and other drugs), but also include yoga, smoothies and glitter face painting. There is collaborative investigation currently being undertaken into the benefits of sober-raving which should provide insight into whether these alcohol-free events could be incorporated into university social calendars (Oxford Brookes University, 2017).

What are the drinking experiences of students' transitioning to university?

Overwhelmingly, the results from across all three studies identified the transition to university as a period of increased and risky drinking. Prospective students in Study I assumed that their alcohol intake

would increase and their participation in drinking practices, particularly preloading, would become more frequent once they arrived at university. These findings were then reflected in the survey results (Study II), which illustrated a significant increase in weekly median unit total (15.9 units prior to university; 31.4 units at university) as well as more frequent drinking. Although NTE settings, such as clubs and bars were locations of much social activity, this study supports evidence illustrating that at home drinking practices are common among students, with increased engagement observed upon entry to university (preloading prior to, 70%; at university, 89%) (Quigg, Hughes & Bellis, 2013).

Findings from Study III extended the research conducted in Study I and II, by giving greater understanding into the nuances, routines, and contexts of students' drinking. For example, high levels of home drinking at university were observed across all three studies, however, Study III adds to our understanding by suggesting that certain 'party flats' develop a reputation of heavy drinking where students congregate and preload together. Further, student drinking games practiced during preloading sessions were found to be inherently risky with most including mixing alcoholic drinks and racing or nominating others to finish their drink quickly. For the students in this study, preloading and drinking games were important drinking strategies used to minimise costs spent at on-licensed venues and create inebriation before entering the night-time drinking environment

The findings across the thesis suggest that universities should extend their focus from reducing the quantity and frequency of student drinking to disrupting at risky and home student drinking behaviours. For example, arranging events during typical preloading hours (8-11pm) where drinking is not the sole focus of the event (e.g. cooking classes, quizzes and film nights) may reduce overall consumption of alcohol during a night out. Additionally, universities themselves should attempt to make students aware of the levels of alcohol they consume before they enter the night time economy and the consequences this could have on their health and wellbeing and experiences of a night out. The findings from Study III also identified popular student nights and alcohol fuelled events such as '*Level Wednesday's*' and '*Quids in at Heebies*'. The implication of understanding drinking in this way is that health promotion efforts can focus on targeting key events or drinking locations and disrupt the materials and meanings

of drinking. For example, altering expectations about events and promoting healthy behaviours such as non-alcohol alternatives.

High levels of home consumption observed across all three studies suggest that macrolevel interventions such as minimum unit pricing (MUP) may have benefits in a university setting where heavy home drinking is normalised. Current alcohol policy is heavily weighted towards regulating drunken behaviour within nightlife environments. Policy aimed at tackling drunkenness within NTE is likely to have limited effect without concomitant strategies aimed at reducing overall consumption levels and minimising harms through off-sales. The policy implications for challenging high rates of preloading are unclear however changes in the pricing of off-licence alcohol, licence premise closing times and activities to prevent heavy drinking during a preload may lend themselves to reduced engagement (Foster & Ferguson, 2013).

Lastly, a theme which emerged across all the strands of research was the excessive drinking behaviours enacted by students during Freshers' period. The construction of Freshers' period, which included student-led society events, club nights and intense alcohol promotion ensured that alcohol played a central role in socialising at the beginning of university life. It is likely that Freshers' period could be used as an important first step to mediate how alcohol is portrayed to new students. Freshers' period could be utilised by universities to promote alcohol awareness practices aimed at limiting consumption and minimising harms. Previous efforts to raise awareness of alcohol at Freshers' fairs have however been contradicted by environmental norms promoting heavy alcohol use (Fuller et al., 2017). For example, at LJMU students reported that a health promotion stall was positioned next to a branded stall handing out free alcohol. Should universities wish to challenge current consumption behaviours, substantial effort from multiple partners, including university staff, the SU and on- and off- licensed premises is required (Sallis, Owen & Fisher, 2008).

Are students' drinking behaviours during the transition to university related to health and social wellbeing?

A key research question asked was whether alcohol use during the transition to university impacts on first year students' health and social wellbeing. The sum of findings indicated some level of dissonance across qualitative and quantitative research strands. Adjusted analyses presented in Study II showed that heaviest drinkers and those who increased their unit intake upon entry into university were found to have the highest rates of negative consequences, such as unprotected sex and injury and ill-mental health, such as homesickness, nervousness and feeling stressed. Among the paired interviewees (Study III), some students spoke of the negative associations that drinking had on their health and academic performance, however, most participants spoke mainly of the positive impacts that drinking had on their social wellbeing. Alcohol was described as '*liquid courage*' used to ease socialisation around unfamiliar peers. Many of the drinkers used alcohol to gain confidence and reduce inhibitions, which made them feel more comfortable in new social situations. Similarly, prospective students in Study I believed that alcohol could be relied upon in the early stages of university, to reduce social discomfort, '*gain confidence*' and strengthen new peer relationships, therefore enabling them to socialise more effectively. Such perceptions are potentially dangerous as participants are more likely to view drinking as desirable and enter university with little regard for the negative outcomes associated with excessive alcohol use (Atkinson et al., 2011; Atkinson et al., 2015). Current policy approaches fail to recognise the social motivations underpinning consumption in peer groups and the associated positive outcomes of this during the transition to university. The benefits of drinking such as enjoyment, the togetherness and the sense of social identity are used to appeal to young drinkers across alcohol advertising however these social elements are often missed from alcohol prevention campaigns.

A theme that emerged from Study III which was not investigated in the other studies was 'learning how to drink at university'. Students who had minimal drinking experience upon entering university were unaware of their personal drinking boundaries at the start of university and described how they used others' drinking levels as a marker of how much they should consume. The pressure to keep up with new peers' drinking often led to negative first-time experiences with alcohol. This finding has

implications for interventions aimed at highlighting drinking limits across the transition from home to university and could be used by policy officials to raise awareness to the consequences of heavy drinking. There is a need for universities to respond to the risks that are associated with the transition to university by providing structured support for first time students transitioning to university to ensure that students feel supported and settle into their new environment without the need to rely on alcohol (Mobach & Maskell, 2011).

What factors are associated with the trajectory of students' drinking across the transition from home to university?

The final research question related to factors associated with the drinking behaviours of first year students transitioning to university. It is evident from the integrated analysis that alcohol use at university is impacted by multiple factors, from the wider youth drinking context, to the university environment, to group and interpersonal psychosocial processes. The multi-level influences identified in the analysis support the application of the socio-ecological framework underpinning this study.

1. National and community level influences

Both qualitative strands highlighted macro-level drivers involved in the development and maintenance of students' drinking behaviour at university. Analysis illustrated that national policy on alcohol sales is significant in ensuring access to affordable alcohol within university settings, with both prospective and first year students characterising discounted alcohol and aggressive marketing as key drivers for consumption. The marketisation and branding of the student social experience began before students arrived at university meaning that pre-existing associations of alcohol and students are confirmed before individuals even step foot on campus. Study III found that once students arrived at university, licensed venues appeared to use targeted marketing techniques such as advertising in residence halls, Freshers' fairs and social media platforms to encourage student patrons to attend club events and purchase heavily discounted alcohol. Thus, providing first year students with new and exciting drinking opportunities. First year students within Study III also highlighted how cheap off-sale alcohol and extended closing

times of bars and clubs within night-life spaces had instigated their increased preloading practices. The dominant offer of alcohol at university suggests that alcohol interventions must move away from an individualised responsibility approach to one that recognises the role that supermarkets and off-licences surrounding university campuses have on the student drinking culture. This ubiquitous marketing of cheap alcohol to students maintains the place of alcohol in the student culture and may serve to encourage heavier drinking among students during this transitional period. As national alcohol policy has shaped the alcohol offered at universities today, it is expected that restricting the spatial and temporal availability, affordability and accessibility of alcohol would result in improvements to students' drinking and reduced harm.

There was agreement across both Study I and III that the student life is transient. Students described that for the first and possibly the only time they had few responsibilities and greater freedom to drink at university. There was a sense that participants were living up to the student image that had been presented to them, where alcohol provided enjoyment and fun before the responsibilities of life after university began. Such findings were echoed in the survey (Study II) where nearly 7 out of 10 first year halls of residence students agreed that university was a time for experimentation with alcohol. The key challenge for policy makers seeking to encourage behavioural change is that students are of an age where they are capable of making their own decisions and for the first time can consume alcohol legally. Regulating behaviour is therefore complex, in past studies students and staff responded negatively to university policies of regulation arguing that such approaches go against students' independence and freedom to drink (Brown, 2016; Larsen et al., 2016). Encouraging students to be responsible for their own drinking behaviour through reducing risk and harm may therefore be a more appropriate response.

2. Institutional level influences

From the qualitative strands of research, it is clear that universities must acknowledge that they have a level of responsibility in relation to their students' health and welfare. My research identified several areas in which universities could develop interventions to reduce the harms associated with alcohol use and create a positive culture of moderate consumption on campus.

Proximity of student accommodation to nightlife drinking venues and retail outlets gave first time students new drinking independence. Further, the boundaries of student hall accommodation were found to be more flexible than other accommodation types with the open and multi flat structure of hall accommodation providing a vital social setting, conducive to preloading and communal drinking. These findings suggest that more student social spaces which are not de facto linked with alcohol are necessary on campus. Another solution could be to utilise residential hall representatives, such key figures could be recruited as mentors to newer students to support them and enhance the favourability of non to moderate level drinking at university. In an attempt to create a safe, healthy and inclusive campus settings several UK universities are currently trialling alcohol-free residential halls, with sanctions given for those who consume alcohol (St Andrews University, University of Chester, University of Bath, and University of Bristol). It is argued however that these efforts fail to disrupt the culture of heavy drinking in student halls as they create accommodation which is designed for non-drinkers and therefore further isolate these students from the rest of the student population and aid perceptions of a negative non-drinker prototype. There is limited evaluation of whether these approaches to students' drinking lead to behavioural change.

There was some level of dissonance across qualitative and quantitative research strands with regards to the drinking behaviours of society sport-led groups. Study III illustrated that drinking activities of some student-led societies appeared to be excessive, ritualised and cohesive. Members cited the exclusive rules of drinking amongst their sport teams, such as consuming a predetermined amount of alcohol during a night of drinking. However bivariate analysis within the survey (Study II) illustrated no significant association between sport group membership and heavy drinking ($p=201$). The small sample in the survey does question whether the study has sufficient power to detect a difference between groups. Other UK research with a larger sample ($N=770$) has detected higher drinking levels among sport team members (Median AUDIT score of 11.5) when compared to non-participants (Median AUDIT score of 11) (Partington et al., 2012). In order to disrupt the transmission of drinking practices for new student members, it may be important to identify those students who play a key role in setting the expectation to drink. Key figures such as sports or social society leaders could be recruited as

mentors to newer students to offer support and encourage lighter drinking practices. Further, initiations were found to be rife at the case university despite them being banned. More needs to be done to prevent the pressure to drink and humiliation that are associated with these student-led practices.

Although silent in the focus group study (Study I) and survey (Study II), some students within Study III referred to the paid partnership that the SU and student-led societies have with local drinking venues and club promoters. The SU plays an important role in marketing Freshers' week and other student events and therefore benefit from local alcohol sales. The established relationship between the SU and local drinking venues may act as an endorsement of drinking to students by the university and warrants further exploration into how such relationships form. This partnership creates a paradoxical situation in which the SU promotes healthy behaviour, such as sensible drinking alongside promoting heavily discounted alcohol events. There needs to be careful consideration of the relative balance of what the SU gains from partnering with such venues. An important caveat to note is that data was collected from the paired interviews in 2016 therefore the SU's partnership with local club promoters may have changed since the point of data collection.

The SU were also criticised for the lack of credible alternatives to drinking offered to students. Although much of the Freshers' period content involves, partying, socialising and drinking, as part of the Alcohol Impact Scheme LJMU have incorporated innovative non-alcoholic events, such as laser quest, table tennis and film nights into their students' Freshers' programme (NUS, 2017). More work may need to go into advertising these events and increasing their appeal to new university students.

Lastly, across both qualitative strands there was agreement around the new-found freedom to drink at university. Most students provided anecdotes of missing class, increased flexibility and free time to drink at university and perceived attitudes of academic and residential staff to be permissive. These findings highlight that universities themselves have some responsibility in altering the perceptions of a permissive and accepting campus drinking culture and must take a university wide approach which includes the involvement of staff, the SU and support services to ensure consistency.

3. Interpersonal and intrapersonal level influences

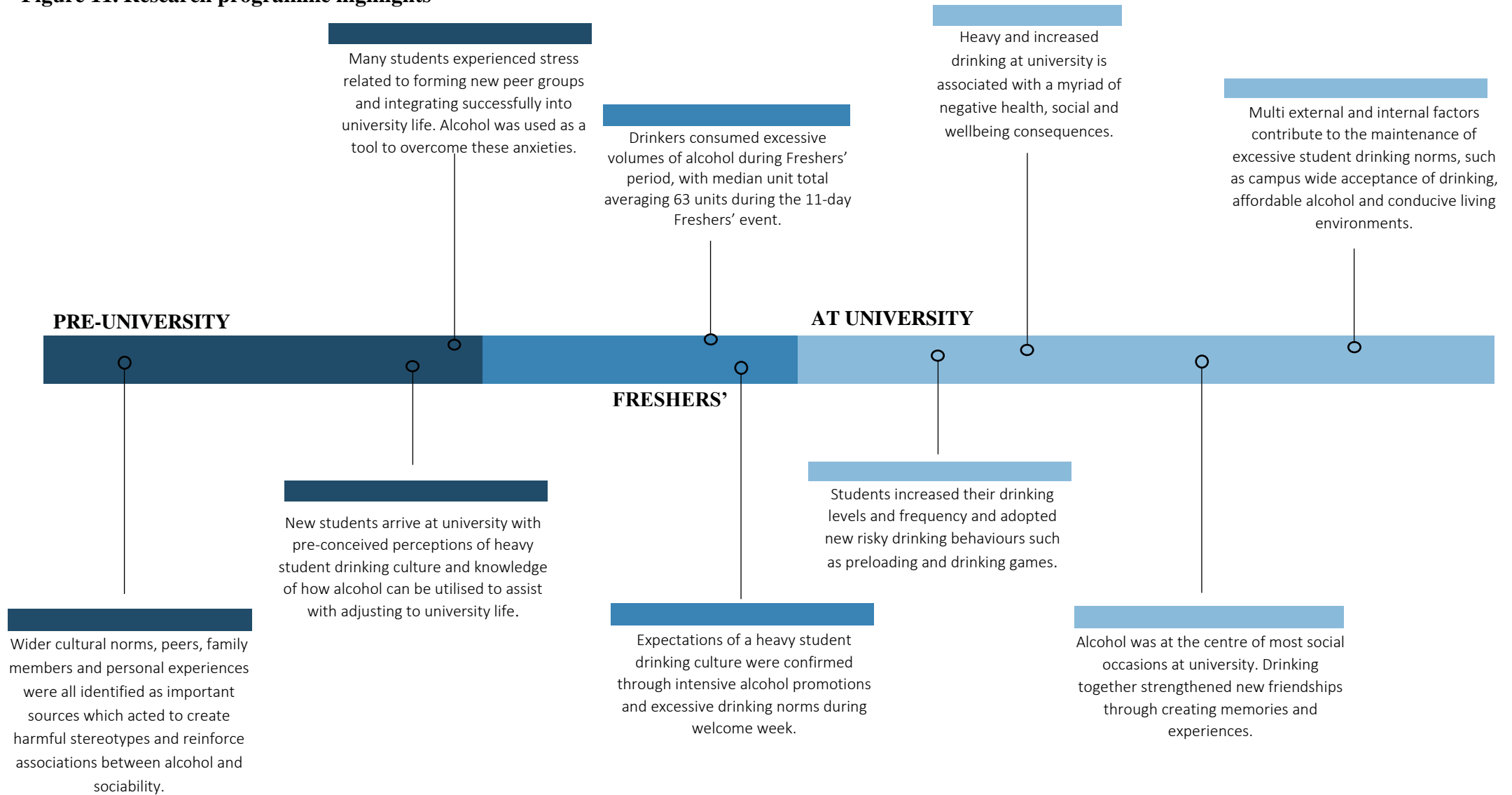
Students across both qualitative strands of research highlighted their concern around the formation of relationships with new peers and successful integration into social peer groups, anticipating that alcohol would aid new relationships and help overcome social anxiety. Exploration of the post-arrival role of alcohol at university (Study III) illustrates that drinking is utilised by first year students to ease socialisation around unfamiliar peers, overcome pre-arrival anxieties and gain social capital. These findings were also reflected in the survey results (Study II), which found that 62% of all students surveyed agreed that alcohol was at the centre of socialising and 61% felt that alcohol had aided new friendships at university. Current policy approaches fail to recognise the social motivations underpinning consumption in peer groups and the associated positive outcomes of alcohol during the transition process (Foxcroft et al., 2015). My research indicates that if we wish to change excessive drinking at university there is a need to disrupt the meaning of drinking as a social practice and move beyond a focus on the harms of alcohol to incorporate recognition of the social and pleasurable nature of drinking. Universities need to offer alternate occasions for socialising which do not involve alcohol, which is in line with assertions made by Blue et al (2016), Supski et al (2017) and Davies, Law & Hennelly (2018). These findings raise questions around what other alternatives there are to alcohol which help to ease socialising; future research is needed to explore this concept further.

Another important issue was the theme around social pressure to drink. Across both Study II and III, students admitted that they had experienced some form of pressure to drink whilst being at university. For example, in Study III participants described the continuous invitations to drink and persistent scrutiny they received from peers after making the decision not to attend a night out. The survey (Study II) added to the qualitative evidence by reporting that 50% of students felt that their university peers expect them to drink. Peers play a vital role in creating and reaffirming drinking norms at university as they provide students with role models and validations of behaviour. One interventional approach might seek to highlight the increasing numbers of non-drinkers in the youth population (ONS, 2016). Further

research into the social experiences and motives behind abstention is required given that non-drinkers have experience in managing pressures to drink and socialise without using alcohol.

Figure 11 identifies the research highlights across the three studies. The findings are plotted on a timeline from students' pre-arrival conceptions of alcohol at university through to students' experiences with alcohol on campus. Through adopting a time-line approach this research identifies the transitional process undergone by students and highlights the areas for early and targeted intervention (see section 7.4).

Figure 11. Research programme highlights



7.4 POLICY AND PRACTICE IMPLICATIONS OF FINDINGS

The results presented in this thesis identify the transition to university as a period of increased and risky drinking which is associated with a range of negative outcomes. Given evidence which indicates heavy patterns of drinking established during early adulthood can continue or develop into patterns of harmful drinking in later adulthood (Mathurin & Deltenre, 2009) the transition to university may present a unique opportunity for university-based interventions which aim to tackle high risk drinking in the early stages of development (Bewick et al., 2008a; McCambridge, McAlaney & Rowe, 2011; Jennison, 2004; Viner & Taylor, 2007).

Traditional prevention efforts focus on interpersonal and individual determinants around drinking (see Chapter 2) and are typically aimed at altering perceptions around others' alcohol behaviours (Foxcroft et al., 2015). These interventions avert their attention to altering individual level consumption behaviours and attitudes and in doing so overlook the diverse nature, social role and context in which drinking is embedded at university. This study suggests that the interplay between individual determinants and the influencing factors of the university setting have contributed to the development and maintenance of a culture of normalised drinking across universities (Brown, 2016; Fegley, 2013). Educating individuals to make healthful changes to their behaviour when the wider context is not supportive has been ineffective and led to short-term health changes in the past (Sallis, Owen & Fisher, 2008). It is therefore suggested that a multi-level tailored approach which aims to challenge the situated norms of drinking across different platforms, such as SU bars, nightlife venues situated in the local community, student halls of residence and student health and wellbeing services would be more beneficial.

7.4.1 Summary of policy and practice implications

National level

- **Ubiquitous marketing of cheap alcohol to students:** Restrictions in the spatial and temporal availability, affordability and accessibility of alcohol may lend itself to reduced drinking and

associated harms among student populations. The Licensing Act 2003 set out restrictions on irresponsible alcohol promotions which apply to all premises across England and Wales. However, results from the current research suggest that aggressive and targeted alcohol marketing is rife in student dense areas. Clearer sanctions need to be identified by the Home Office to clamp down on such marketing techniques which could help reduce the number of student aimed alcohol promotions and events on campus.

- **High rates of preloading among student populations:** The policy implications for challenging high rates of preloading are unclear however changes in the pricing of off-licence alcohol, licence premise closing times and activities to prevent heavy drinking during preloading may lend themselves to reduced engagement (Foster & Ferguson, 2013). As students in my study acknowledged, it is much cheaper to purchase off-sale alcohol than it is to buy alcohol on-sale. Preloading was therefore found to be an important drinking strategy used to minimise cost spent at on-licensed venues and create inebriation before entering the night-time drinking environment. The premise of MUP is to reduce the price gap between alcohol purchased in off -and on- licenced venues and restrict the sale of discount alcohol. A form of MUP has been in operation in Canada. An evaluation of this policy change from 1989–2010 found that a 10% price increase reduced alcohol consumption by 3.4% (Stockwell et al., 2012; Zhao et al., 2013). If applied to the UK, this licensing could potentially reduce high preloading rates among student populations by making preloading less cost effective and therefore more unappealing.
- **Wider cultural acceptance of students' drinking:** National media and social networking sites played a key role in shaping the cultural norms around alcohol and its use at university. Media outlets should be utilised to encourage the promotion of clear, evidence-based messaging regarding students' alcohol use and related harms. This could be done through harnessing professional youtubers to promote healthy lifestyle changes. Leiner and colleagues (2018) stipulate that YouTube is a valuable health education platform that could be used to influence young adults' health behaviours and alter social norms. To date there is limited evidence of this

approach in its practice, therefore future research is necessary to develop appropriate messaging and explore how this is perceived among student groups.

Community level

- **Limited non-alcohol alternatives:** Students referenced the lack of alternatives to alcohol on campus. Making non-alcoholic drinks more appealing to students by ensuring that they are a cheaper and more readily available alternative to alcohol could help to challenge heavy drinking norms and lower alcohol levels at university. For example, mandatory licensing could introduce conditions to reduce the cost of non-alcoholic drinks. Further, national student bodies could collaborate with local drinking venues to ensure free or low-cost water is provided at student events and encourage a variation in non-alcoholic alternatives.
- **Heavy promotion of alcohol around student dense areas:** As Freshers' week was found to foster heavy drinking and confirm alcohol norms, the intense promotion of alcohol at Freshers' fairs and the offer of alcohol to new students needs to be regulated. Universities should work with their Student Unions to discourage on-licensed promotions at Freshers' events and work to encourage attendance more local health partners and support services.

Institutional level

- **Pre-arrival perceptions of a heavy student drinking culture:** There is a need to target expectations and cultural presentations of student drinking before young people arrive on campus. Universities themselves play a key role in setting the expectation to drink through the promotional material they send to incoming students. Universities must therefore attempt to promote other aspects of life on campus and alternative events that do not rely upon drinking during the build up to students' transition to university.
- **Negative non-drinker stereotype:** One interventional approach might seek to challenge students' prejudicial beliefs about non-drinkers as being less sociable than students who regularly drink. Awareness- raising campaigns run by universities could promote the positive experiences that students have when attending non-alcohol focused events. Given the results

from this research, which found non-drinkers resisted social pressure to drink, one line of further enquiry would be to understand how non-drinking students manage to socialise in an alcohol dominated environment.

- **Increased engagement in student drinking rituals:** Arranging events during typical preloading hours in which alcohol is not the sole focus may reduce drinking among students. Such initiatives have been tested as part of the AIS (NUS, 2017). For example, a pre-drinking café has been set up by Brighton Students Union, here students meet weekly to eat before a night of drinking and socialise. The event is popular with over 200 students attending each week, however due to a lack of evaluation, the impact that these events have on students' drinking behaviours is unclear (NUS, 2015). Further, universities themselves should attempt to make students aware of the amount of alcohol that they are consuming before they enter the night time economy and the consequences this could have on their health and social wellbeing.
- **Popular student drinking events:** Students attended popular student nights and alcohol fuelled events such as '*Level Wednesday's*' and '*Quids in at Heebies*'. Health promotion efforts could focus on targeting these events and drinking locations by disrupting the materials and meanings of drinking. For example, arranging non-alcohol events on popular week nights, altering drinking expectations of events and promoting healthy behaviours such as non-alcohol alternatives. One event which may have the potential to alter perceptions of a typical student night out is 'Sober-raving', which exchanges alcohol for yoga, smoothies and glitter face painting (Oxford Brookes University, 2017).
- **Freedom to drink:** Most students provided anecdotes of missing class, increased flexibly and free time to drink at university and perceived attitudes of academic and residential staff to be permissive. Universities themselves have some responsibility in altering the perceptions of a permissive and accepting campus drinking culture and must therefore take a university wide approach through involvement of staff, the Student Union and support services to ensure consistency. More events and extracurricular activities should be developed as this will also fill students' free time with social activities which are not centred around drinking.

- **The Student Union’s partnership with local drinking venues creates paradoxical messaging:** The Student Union needs to consider the relative balance of what they gain from partnering with licensing venues and the promotion of Freshers’ week to incoming students. This partnership appears to create a paradoxical situation in which the Student Union promotes healthy behaviour, such as sensible drinking alongside promoting heavily discounted alcohol events.
- **Student halls of residence conducive to students’ drinking:** Student accommodation should be a target for alcohol intervention. First year students discussed (Study III) how certain ‘party flats’ have developed a reputation of heavy drinking where students congregate and preload together. These residences should be supported by residential staff and encouraged to drink moderately. Universities could also utilise residential hall representatives (Study II) to mentor to newer students to support new students and enhance the favourability of non to moderate level drinking at university.
- **Heavy drinking among student-led societies:** Despite being banned at LJMU initiation ceremonies are still a popular event organised to ‘welcome’ new student group members. More needs to be done to prevent the pressure to drink and humiliation that are associated with these student-led practices. Society-led sport groups could be drawn attention to the negative impacts that alcohol has on physical activity and fitness which may lead professional sport players to reduce their alcohol intake. Further, key figures such as sports or social society leaders could be recruited as mentors to newer students to offer support and encourage lighter drinking practices, however care is needed if peer-peer interventions are to be implemented.

Interpersonal level

- **Drinking viewed as a facilitative tool for socialising:** Current policy approaches fail to recognise the social motivations underpinning consumption in peer groups and the associated positive outcomes of this during the transition to university. There is a need to disrupt the meaning of drinking as a social practice and move beyond a focus on the harms of drinking to

incorporate recognition of the social and pleasurable nature of drinking. Universities need to offer alternate occasions for socialising which do not involve alcohol.

- **Social media is used by students to create memories and relive drinking experiences with peers:** Other ways to create, share and relive memories with friends that do not centre around drinking need to be created.
- **Social pressures to drink:** University based interventions could steer students towards the perception that alcohol is consumed moderately among university students and educate individuals of the increasing numbers of young people who abstain from alcohol. Although there is limited evidence of sustained changes to drinking with these types of social norms approaches are used in student groups (Bewick et al., 2008b; Kypri et al., 2013; Kypri et al., 2014).

Intrapersonal level

- **Anxiety around the move to university:** There is a strong student services department at the university which includes counselling services for students around mental health and substance abuse. The promotion of these services could be strengthened during the transition to university, especially the services linked to alcohol use. Additionally, schools could also be utilised as a forum for alcohol interventions. Multicomponent interventions could be developed to help prepare prospective students for the transition from to university, in order to primarily reduce alcohol use and related harms and to reduce anxiety and stress.
- **University represents a period of new-found independence:** Students are of an age where they are capable of making their own decisions and for the first time can consume alcohol legally. Encouraging students to take responsibility for their own drinking behaviour through reducing risk and harm may be a more appropriate response.

7.5 STRENGTHS AND LIMITATIONS OF THE RESEARCH PROGRAMME

Strengths and limitations of each study have been discussed in detail in their respective chapters. There are general strengths and limitations of the overall research programme which will now be acknowledged. Firstly, the findings of this thesis were from a single university in the North West of England and therefore cannot be generalised to all first-year university students or prospective university students in the UK. It would have been beneficial to have a larger number of participants across the programme, although as discussed in the respective chapters, recruitment was difficult as there was a limited window available for data collection. As the aim of the research was to measure the trajectory of students' drinking across the transition from home to university extending the period of data collection for each study would have introduced further recall bias and would arguably not capture transitional drinking behaviours of first year students.

My approach to this subject area was to explore the pre and post arrival drinking behaviours of three separate samples (prospective university students (Study I), first year halls of residence students (Study II) and first year university students (Study III)). To gain a more comprehensive picture of the changes in drinking behaviour, motivations to drink and related harms of alcohol across the transition from home to university it may have been valuable to conduct a prospective study exploring pre and post arrival behaviours of one study sample. This research design would have permitted me to follow drinking trends and identify the changing influences on alcohol conceptions throughout students' transition to university. During study development I had considered conducting a prospective research design, however I was concerned of the risk of high dropout rates and temporal demands associated with prospective research designs (Caruana et al., 2015). Although a prospective study would have been beneficial, the findings from my research fill a previously scarce field of literature and have identified several potential intervention points (see section 7.4).

In addition, although the qualitative strands of research were inclusive of non-drinking students, across both the focus group and paired interview studies there were only a handful of students (N=8) who stated that they abstained from alcohol at university. Surprisingly non-drinking students within Study III did not feel any pressure to drink whilst at university, stating that once their mind was made up no

one contested their decision of abstinence. This acknowledged, if I were to repeat the programme of research, more effort would be made to recruit non-drinking students. It would be of public health interest to understand the social experiences of non-drinkers at university given that these individuals have experience in managing pressures to drink and socialise without using alcohol. Understanding how abstinence is achieved in an alcohol dominant environment might help policy officials to challenge alcohol as an essential ingredient of enjoyable and sociable interactions among young people.

Whilst my research identifies the transition to university as a period of increased and risky drinking which is associated with a range of negative outcomes, it is unclear from the evidence whether the shift observed in alcohol use is inherent to the university context or is associated with emerging adulthood more universally. Recent population data reports that the prevalence of drinking has declined markedly among UK youth populations (ONS, 2018). Research is yet to explore the sociodemographic patterns and associations of this downward trend of youth drinking (Oldham et al., 2018). However, it may be that university students are a sociodemographic group whose alcohol levels are not decreasing. Within my research, participants from across both qualitative strands of research speculated that those who do not attend university drink less. Understanding how age matched controls drink in comparison to those attending university will help inform whether a population level intervention could be used to lower drinking in universities or whether interventions on campus which target students' behaviour alone is warranted. Through comparing the drinking behaviours of non-students and students, a clearer sense into the motives behind consumption and the trajectory of youth drinking should be understood. This acknowledged, if I were to repeat the research I would compare drinking rates of a sample of non-students with those enrolled at university.

Finally, on reflection the qualitative strands of this research gave huge value to the understanding of student drinking during the transition to university. Given the limited knowledge on the phenomena of drinking during the transition from home to university the research may have benefited from conducting the qualitative paired interview (Study III) first. The findings from these interviews could then have informed the development of the questionnaire. This would help me scope what would be the focus of the questionnaire and reduce the number of questionnaire items; therefore, improving response.

One of the major strengths of the research is its original contribution to knowledge. This research contributes to an important gap in the literature as it is one of the only studies to measure UK students' alcohol use during the move from home to university. The triangulated findings identify the transition to university as a high-risk period for problem drinking which is associated with an increased risk of negative health and wellbeing outcomes and alcohol-related harms. Upon entering university, typical weekly median unit total increased by 15.5 units (15.9 units prior to university; 31.4 units at university) and an uptake of risky drinking behaviours (such as preloading and drinking games) were observed. The transition to university may therefore present a unique opportunity for university-based interventions which aim to tackle high risk drinking in the early stages of development. This distinguishes this study as whilst the proportion of young people (16 to 24 years) consuming alcohol has decreased in the UK (ONS, 2018), my research provides evidence of a cohort of young people whose drinking levels have increased.

Secondly, the study is among the first of its kind to extensively explore young adults' perceptions of drinking prior to students arriving at university. Through utilising focus groups, a survey method and paired interviews, a multiplicity of views were explored. The findings have provided new insights into how young people conceptualise alcohol's use at university. Through various sources of information, new students arrived at university with pre-conceived perceptions of a heavy student drinking culture and knowledge of how alcohol can be utilised to assist with adjusting to university life. The research highlights the significance of pre-arrival alcohol expectations and demonstrates the impact that widely held beliefs have on shaping ideology and influencing drinking behaviour.

In addition, this research provides an original contribution to knowledge by triangulating both qualitative and quantitative approaches to explore students' drinking experiences and the impacts of alcohol across the transition from home to a British university setting. Therefore, a strength of this thesis has been the wide range of study designs used to explore multiple perspectives and experiences of alcohol use across the transition from home to university. The findings show that for the majority, alcohol featured regularly at university social occasions (62%) and was key to forming new friendships

(61%). The qualitative methods were then used to garner new insights into the nuances, routines, and contexts of students' alcohol use on campus. For example, drinking during a night out at university involved social and preparatory activities such as preloading, socialising with friends, attending flat parties and popular student events and locations. New insight into the magnitude of students' drinking (Quantitative) as well the context and what drives and maintains alcohol behaviours at university (Qualitative), can be used to inform the development of future alcohol interventions by identifying initiatives for policy makers and developers.

7.6 RECOMMENDATIONS FOR FUTURE RESEARCH

This programme of research favoured a broad focus on several topic areas including perceptions of the student drinking culture, prevalence and factors associated with alcohol use as well as related harms during the move from home to university. This exploratory approach was favoured over a more focussed examination of one subject. Whilst a strength of this thesis has been the wide range of study designs used, this breadth of approach has identified several specific areas open for potential future research investigation.

Given evidence which identifies significant increases in alcohol consumption, uptake of risky drinking practices and acute alcohol-related health consequences during the transition from home to university the transitional period warrants the development, implementation and evaluation of a university-based intervention. The alcohol intervention should include aspects which challenge the normalisation of heavy consumption prior to arrival, the excessive drinking behaviours practised during Freshers' period, the dominance of home drinking and an organisational response focussed on reducing harms and ill-mental health. Future research should aim to understand whether an intervention during this crucial transitional period would be beneficial and lead to sustained behavioural changes.

One research extension would be to explore students' drinking across the university years. Evidence in Chapter 4 and 6 (Study I and III) suggests that participants expected their drinking to taper off in the subsequent university years. Future research might focus on exploring whether drinking habits, motivations to drink and associated harms alter as student progress throughout university. Longitudinal

research, mapping students' behaviour from pre-arrival right the way through to the third year of university may identify factors contributing to the development and maintenance of student drinking behaviours and facilitate the development of effective approaches to reducing harms among student populations.

In addition, my study identifies a myriad of acute alcohol-related harms associated with high level drinking across the transition from home to university. Although this has provided useful information to inform local university-based interventions, an important research extension would be to investigate the longer-term implications of drinking at university on individuals' alcohol behaviours and chronic health in later adulthood. Longitudinal research could investigate the links between university drinking behaviour and levels of drinking and related harm in later adulthood. Understanding whether drinking during the university years has longer term influence on behaviour will determine the level of intervention required to curb excessive student drinking.

7.7 CONCLUSION

In conclusion, evidence presented in this thesis helps contribute to an important gap in the literature as it is one of the only studies to measure UK students' alcohol use during the move to university. Whilst the proportion of young people (16 to 24 years) consuming alcohol has decreased in the UK (ONS, 2018), the current study provides evidence of a cohort of young people who still regularly engage in high risk drinking often with the specific aim of getting intoxicated. The upward trend of drinking is a concern given the wide-ranging associations with excessive student alcohol consumption and risk of negative consequences and ill-mental health. Students arrive at university with strong perceptions of a heavy student drinking culture. Upon entering university, the knowledge and expectations of a heavy student drinking culture obtained prior to arrival is then confirmed through intensive alcohol promotions, new social drinking opportunities and excessive drinking norms which characterise the first few weeks of university. Findings further indicate that multi-level influences act to maintain students drinking at university. The findings from this study emphasise the need for the development of targeted interventions which aim to prevent increases in drinking behaviour upon entry to university and minimise the harms related to heavy alcohol use. Further, the study highlights the importance of

the norms and beliefs which govern the student culture, a wider multi- level approach which aims to challenge attitudes should be considered when tailoring health promotion efforts.

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APPENDICES

Appendix 1: Study One, Gatekeeper Recruitment Letter



***For the attention of the school's head teacher**

Title of Research:

Understanding prospective university students' perspectives of the university drinking culture.

Dear (Insert head teachers name here)

My name is Nichola Gambles, I am a PhD student at the Centre for Public Health at Liverpool John Moores University. I am currently undertaking an exciting research project which aims to explore prospective university students' attitudes, perceptions and views on the university drinking culture. It is anticipated that the findings from this project will go on to inform the development of local interventions which will provide information and support to students during the transition to university.

As part of the research I wish to conduct small group interviews with students who have applied/intend to go to university in September 2016. I hope to get a sample of all areas across Liverpool; therefore, your participation is very important to us. Individual educational establishments or areas will not be identified in the research findings. I am contacting you to ask if you would be willing to help recruit year 13 students from your school to participate in two focus groups (4-8 students per group). Focus groups discussions will last approximately 60 minutes and will be conducted in students' free period, lunch hour or after school.

Details of the study are enclosed. Participation is of course voluntary. However, it is important that you read this before deciding to take part or not. Following the BPS code of practice, the study will be kept strictly confidential, neither the school nor the students will be named. The research has been approved by the Liverpool John Moores Research Ethics Committee: Reference number: 16/PBH/001

So as not to disrupt the student exam period, it is anticipated that the study will be conducted at the beginning of the summer term. A consent form is included with this letter. I would really appreciate your help with the recruitment process and ask that if you would like your school to participate please complete the enclosed consent form and return it in the freepost envelope provided. Alternatively, or if you have any further questions please contact Nichola Gambles N.H.Gambles@2015.ljmu.ac.uk.

Yours sincerely,

Nichola Gambles

Overview of the research project

The study will look at students' perceptions, attitudes and beliefs around alcohol consumption at university.

Questions will be asked relating to:

What existing knowledge do students have around alcohol and its associated consequences?

What do students think a typical university night out entails?

In terms of alcohol use, what do students think is expected of them at university?

What factors have influenced students' perceptions of the university drinking culture?

Why do students think people at university drink?

The school's role in the research

To identify and approach year 13 students who have applied/intend to go to university in September 2016 to participate in focus group discussions. The researcher has attached a recruitment email which the school may want to utilise to encourage student participation. Once pupils have been selected for participation, the researcher will provide consent forms which participants must sign. In order to conduct the focus groups, the researcher will also need access to a spare classroom for the duration of the focus group discussion.

Title of Project: *"Understanding prospective university students' perspectives of the university drinking culture"*

Name of Researcher and School/Faculty: Nichola Gambles, Centre for Public Health, Faculty of Education, Health and Community, LJMU

1. What is the reason for this letter?

I am contacting you to ask for your help in recruiting participants for my postgraduate research study which explores prospective university students' perspectives of drinking at university.

2. What is the purpose of the study/rationale for the project?

This research forms part of a PhD programme. The purpose of this study is to understand students' beliefs and attitudes of alcohol use at university in an attempt to inform and develop local interventions which will provide information and support to students during the transition to university.

3. What we are asking you to do?

This research has been granted approval by the head teacher (Mr/Mrs insert name) at (Insert schools name). Your role in this study would be to disseminate a recruitment email to all year 13 students that have applied /intend to go to university in September 2016. The recruitment email is appended at the end of this document for your consideration.

4. If you are willing to assist in the study what happens next?

You will be asked to send out the recruitment email to year 13 prospective university students. Students who are interested in participating will be asked to contact the researcher, these individuals will then be contacted personally to participate in a focus group discussion that will last approximately one hour. Focus group discussions will take place in students' free periods, lunch hour or after school, where

refreshments will be provided. Additionally, the researcher would need to have access to a spare classroom to conduct the research.

5. How we will use the information?

The group discussion will be audio recorded if agreed by the participant and then transcribed. These recordings will only be listened to by the research team and will be deleted after the interview has been written up. All audio tapes will be kept locked in a filing cabinet in a secure office or stored digitally on a secure computer at Liverpool John Moores University. Any quotes used in the research will be anonymous and will not identify participants. Consent forms and audio recordings will be kept separately. Students will also be asked to complete a short demographic questionnaire which includes questions on alcohol use. All the information collected about participants during the course of the research will be kept strictly confidential.

6. Will the name of my organisation taking part in the study be kept confidential?

The name of the participating school will be kept strictly confidential

7. What will taking part involve? What should I do now?

- Sign and return the **Gatekeeper Consent Form** provided

Contact Details of Researcher

Nikki Gambles (LJMU PhD Student) –N.H.Gambles@2015.ljmu.ac.uk

Dr Zara Quigg (Supervisor)- Z.A.Quigg@ljmu.ac.uk

Dr Lorna Porcellato (Supervisor)- L.A.Porcellato@ljmu.ac.uk

Appendix 2: Study One, School Consent Form



Nikki Gambles
PhD Student
Centre for Public Health
Faculty of Health, Education and Community

'To understand prospective university students' perspectives of the university drinking culture.'

Please tick to confirm your understanding of the study and that you are happy for your institution to take part and your facilities to be used to host parts of the project.

1. I confirm that I have read and understand the information provided for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that participation of the staff and students in the research is voluntary and that they are free to withdraw at any time, without giving a reason and that this will not affect their legal rights.

3. I understand that any personal information collected during the study will be anonymised and remain confidential.

4. I agree for our school to take part in the above study.

5. I agree to conform to the data protection act

Name of Head teacher:

Date:

Signature:

Name of Researcher:

Date:

Signature:

Appendix 3: Study One, Participant Information Sheet



Liverpool John Moores University

Participant Information sheet

Title of Project: Understanding student's attitudes and beliefs around the university drinking culture.

Name of Researcher and School/ Faculty: Nichola Gambles, Centre for Public Health, Faculty of Education, Health and Community, LJMU

This project has been approved by the ethics panel of Liverpool John Moores University (16/PBH/001). To take part in this research you must have applied/ intend to go to university in September 2016.

You are being invited to take part in a research study. Before you decide if you would like to take part, it is important that you understand why the research is being done and what it involves. Please take time to read the following information. Ask us if there is anything that is not clear or if you would like any more information.

1. What is the purpose of the study?

The purpose of this study is to explore your attitudes and beliefs around the university drinking culture. I am interested in your thoughts on university students' drinking, what has influenced your ideas and what you already know about alcohol use.

2. Do I have to take part?

No. It is up to you to decide whether or not to take part. You are still free to withdraw without giving a reason. A decision to withdraw will not affect your rights / service you receive. However, once the focus groups have been transcribed, it will be impossible to withdraw your information from the study.

3. What will happen to me if I take part?

This research involves taking part in a group discussion. The research will last approximately 60 minutes. The findings from this study will be used to inform and develop suitable support services for university students. Research will also be shared through relevant conferences and within a peer-review journal.

4. Are there any risks / benefits involved?

There are no risks involved but if you feel uncomfortable answering some questions then you are permitted to leave them out.

Whilst there are no direct benefits for taking part in the research, the answers you give will help inform and develop effective student support services at university. This research will therefore ultimately help to further improve student's experience at university. If there is a problem you can contact the researcher at the address below.

5. Will my taking part in the study be kept confidential?

Yes. All the information collected about you during the course of the research will be kept strictly confidential. Your responses will be anonymised and stored securely on a password protected computer.

This study has received ethical approval from LJMU's Research Ethics Committee: Reference number 16/PBH/001

Contact Details of Researcher

Nikki Gambles (LJMU PhD Student) –N.H.Gambles@2015.ljmu.ac.uk

Dr Zara Quigg (Supervisor)- Z.A.Quigg@ljmu.ac.uk

Dr Lorna Porcellato (Supervisor)- L.A.Porcellato@ljmu.ac.uk

Thank you for taking the time to consider this study

If you would like information on where to get support for alcohol or substance misuse then please visit sites such as:

<http://www.liverpoolalcoholservice.nhs.uk/aboutus/>

www.addaction.org.uk

www.alcoholconcern.org.uk

Appendix 4: Study One, Participant Consent Form



Nikki Gambles
PhD Student

Centre for Public Health

Faculty of Health, Education and Community

'To understand prospective university students' perspectives of the university drinking culture.'

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1. I confirm that I have read and understood all of the information provided for the above study. I have had the opportunity to think about the information and ask any questions.
 2. I understand that my taking part in the research study is voluntary and that I am free to withdraw at any time, without giving a reason and this will not affect rights.
 3. I understand that any personal information collected during the study will stay confidential.
 4. I agree to participate in the study as outlined to me

Name of Participant

Date

Signature:

Appendix 5: Study One, Demographic Questionnaire



Demographic questionnaire

Q3: What is the name of your school/ college? _____

Q3: How do you prefer to think of yourself?
 Male Female Other

Q3: How old are you? _____

Q5: What is your ethnicity? White Mixed Asian Black Chinese Other Ethnic group

Q3: What is your postcode?

We would like to know about your alcohol consumption, please use the unit calculator to answer the questions below.

Number of units in a drink



How often do you have a drink containing alcohol?	Never	Monthly or less	2 - 4 times per month	2 - 3 times per week	4+ times per week
How many units of alcohol do you drink on a typical day when you are drinking?	1 - 2	3 - 4	5 - 6	7 - 9	10+
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

Appendix 6: Study One, Interview Schedule

Focus group discussion schedule with prospective students:

Introduction

- Researcher introduces themselves, the project and the types of questions that will be asked.
- Introduce the consent form, confidentiality, participant information sheet and the screening questionnaire.
- Each participant introduces themselves.

Introduction

Researcher introduces themselves, the project and the types of questions that will be asked.

Introduce the consent form, confidentiality and participant information sheet.

Each participant introduces themselves.

1. **Ice Breaker:** Alcohol unit and knowledge exercise:
2. **I am interested in your thoughts about drinking at university.** Describe a typical night out at university that involves alcohol?

Probes:

- Who drinks?
 - How often do they go out drinking?
 - When do they drink?
 - Where do you think students drink?
 - What do students drink?
 - How many drinks do you think students drink?
3. **Why do you think students at university drink alcohol?** Probe: What role does alcohol play in socialising at university? What aspects of Liverpool John Moores University encourage/discourage your drinking?
 4. **So if I get you to describe a typical week that involves drinking alcohol?** Probe: where might you go out and drink alcohol? What time would start drinking/finish drinking? What might you drink? Would you participate in pre-drinking/drinking-games/rounds?
 5. **So if you compare yourself to a typical university student how might your drinking behaviours differ?** Probe: What do you think the reasons are for differences/similarities in drinking behaviours? (How often, quantity, drinking practices etc.)? Tell me how you think your drinking behaviour might change or stay the same once you start university? How? Why?
 6. **Most of you will be familiar with fresher's week, can you explain what you think students get up to?** Probe: What do you think is expected from you?
 7. **Where does your knowledge about drinking at university come from?** Probes:

Did you have any brothers / sisters or any other family members that shared their experiences with you? What about the media, have you seen any articles that focus on students and drinking? Have you spoke about it with your friends at school? Have you been provided with any information about what to expect at university by your school/ college.

8. **What sorts of concerns /issues might prospective students like yourselves have about moving to university?**
9. **Anything else to add?**

End:

- Each participant completes the demographics/alcohol screening survey.

Appendix 7: Study Two, Halls of residence representative's Participant Information

Sheet



Title of Project: Exploring the impacts of the transition to university on first year undergraduate student drinking patterns and the relationships with health, wellbeing and risk-taking behaviours.

Name of Researcher and School/ Faculty: Nichola Gambles, Centre for Public Health, Faculty of Education, Health and Community, LJMU

This project has been approved by the ethics panel of Liverpool John Moores University. To take part in this study, you must be a first year Liverpool John Moores University student and be over the age of 18.

You are being invited to take part in a research study. Before you decide if you would like to take part, it is important that you understand why the research is being done and what it involves. Please take time to read the following information. Ask us if there is anything that is not clear or if you would like any more information. Please take the time to decide if you would like to take part or not.

1. What is the purpose of the study?

As part of this study you will be acting as a researcher, you will be asked to recruit participants to complete a questionnaire which explores the challenges and impacts of the transition to university on students' drinking behaviour. This research is part of a wider PhD programme and your role within the research will be fundamental. You will not only gain valuable research skills but also experience what it is like to be an academic researcher.

2. Do I have to take part?

No. It is up to you to decide whether or not to take part. You are still free to withdraw at any time and without giving a reason and a decision to withdraw will not affect your rights/ any future treatment/ service you receive.

3. What will happen to me if I take part?

If you agree to participate you will be asked to attend a half day research training event, where you will receive information on the study's aim, methodology, practicalities, good research practice and ethical understanding. Once you have been trained you will distribute questionnaires to all flats within the halls of residence that you represent. Once the questionnaires have been completed you will be asked to send them to the Centre of Public health, LJMU in the enclosed self-addressed envelope. You will receive a £10 shopping voucher for your assistance with this study.

The findings collected from the completed questionnaires will be used to inform agencies involved within the project (Liverpool Students' Union, NUS). These findings will be used to inform and develop suitable support services for university students. Research will also be shared through relevant conferences and within a peer-review journal.

4. Are there any risks / benefits involved?

The information about research conduct, provided at the training event should be followed throughout recruitment, in doing so there will be no risk to you or selected participants.

In addition to the shopping vouchers, your role within this research is vital, you will not only gain valuable research skills but also experience what it is like to be an academic researcher, which can be used to enhance your CV and job application forms.

The research itself will help inform and develop effective student support services at university. This research will therefore ultimately help to further improve students' experiences at university. If there is a problem, you can contact the researcher at the address below.

5. Will my taking part in the study be kept confidential?

All the information you provide during the course of the research will be kept securely and will remain confidential.

This study has received ethical approval from LJMU's Research Ethics Committee: Reference number 15/EHC/058

Contact Details of Researcher

Nikki Gambles (LJMU PhD Student) –N.H.Gambles@2015.ljmu.ac.uk

Zara Quigg (Supervisor)- Z.A.Quigg.ljmu.ac.uk

Lorna Porcellato (Supervisor)- l.a.porcellato@ljmu.ac.uk

Thank you for taking the time to consider this study

If you would like information on where to get support for alcohol or substance misuse then please visit sites such as:

studentwellbeing@ljmu.ac.uk

<http://www.liverpoolalcoholservice.nhs.uk/aboutus/>

www.addaction.org.uk

www.alcoholconcern.org.uk

PhD researcher details:

Nichola Gambles

Centre for Public health

Liverpool John Moores University

Henry Cotton Building

15-21 Webster Street

Liverpool, L3 2ET

N.H.Gambles@2015.ljmu.ac.uk

Appendix 8: Study Two, Halls of residence representative's, Participant Consent Form



PhD Student
Centre for Public Health
Faculty of Health, Education and Community

1. I confirm that I have read and understood all of the information provided for the above study. I have had the opportunity to think about the information and ask any questions.
2. I understand that my taking part in the research study is voluntary and that I am free to withdraw at any time, without giving a reason and this will not affect rights.
3. I understand that any personal information collected during the study will stay confidential.
4. I agree to take part as a researcher and for this study and distribute questionnaires to first time, first year LJMU students.
5. I agree to attend the research training event and follow the research guidelines and ethical considerations as instructed, during participant recruitment.

Name of Participant

Date

Signature

Appendix 9: Study Two, Participant Information Sheet



Liverpool John Moores University



Participant Information sheet

Title of Project: Exploring the impacts of the transition to university on first year undergraduate student drinking patterns and the relationships with health, wellbeing and risk-taking behaviours.

Name of Researcher and School/ Faculty: Nichola Gambles, Centre for Public Health, Faculty of Education, Health and Community, LJMU

This project has been approved by the ethics panel of Liverpool John Moores University. To take part in this survey you must be a first time, first year Liverpool John Moores University student and be over the age of 18.

You are being invited to take part in a research study. Before you decide if you would like to take part, it is important that you understand why the research is being done and what it involves. Please take time to read the following information. Ask us if there is anything that is not clear or if you would like any more information. Please take the time to decide if you would like to take part or not.

1. What is the purpose of the study?

The purpose of this study is to explore the impact of the transition to university on student drinking behaviours. I am interested in students' expectations and perceptions of the university drinking culture and what challenges students are faced with when they start university.

2. Do I have to take part?

No. It is up to you to decide whether or not to take part. You are still free to withdraw at any time and without giving a reason, however, after the research is written up, it will be impossible to take out your information from the report. A decision to withdraw will not affect your rights/ any future treatment/ service you receive.

3. What will happen to me if I take part?

This research involves completing a pen-pencil questionnaire relating to alcohol use before and during the transition to university that will take approximately 20 minutes to complete. The data from the questionnaire will then be anonymised (all names removed) so that you are not identifiable.

The findings from the questionnaire will be used to inform agencies involved within the project (Liverpool Students' Union, NUS). These findings will be used to inform and develop suitable support services for university students. Research will also be shared through relevant conferences and within a peer-review journal.

At the end of the questionnaire, you will be asked if you would like to also take part in a follow up focus group, participation is optional.

4. Are there any risks / benefits involved?

There are no risks envisaged but if you feel uncomfortable answering some questions then you are permitted to omit them. Whilst there are no direct benefits for taking part in the research, the answers you give will help inform and develop effective student support services at university. This research will therefore ultimately help to further improve student's experience at university. If there is a problem you can contact the researcher at the address below.

5. Will my taking part in the study be kept confidential?

Yes. All the information collected about you during the course of the research will be kept strictly confidential. Your responses will be anonymised and stored securely on a password protected computer.

This study has received ethical approval from LJMU's Research Ethics Committee: Reference number: 15/EHC/058

Contact Details of Researcher

Nikki Gambles (LJMU PhD Student) –N.H.Gambles@2015.ljmu.ac.uk

Lorna Porcellato (Supervisor)- l.a.porcellato@ljmu.ac.uk

Thank you for taking the time to consider this study

If you would like information on where to get support for alcohol use then please visit sites such as:


studentwellbeing@ljmu.ac.uk

<http://www.liverpoolalcoholservice.nhs.uk/aboutus/>

www.addaction.org.uk

www.alcoholconcern.org.uk

Appendix 10: Study Two, First year halls of residence survey



Alcohol use during the transition to university

Q1: How old were you on the 19th of July 2015?

Q2: How do you prefer to think of yourself?
 Male Female Other

Q3: What is your country of birth? _____

Q4: What is your ethnicity? White Mixed Asian Black Chinese Other Ethnic group

Q5: What is the name of the halls of residence you live in ? _____

Q6: Which of the following best describes your living arrangements?
 I live with male students only I live with female students only I live with a mix of male and female students Other

Q7: Are you involved in any of the following in your spare time? (Tick all that apply)
 University academic club University sports clubs University interest clubs Volunteering Local sports club Local interest club Part-time job None of these

Q8: Rate the following reasons in order of importance from 1 to 9 (1 being most important) for the reasons you chose to come to university ?

To further my career prospects	<input style="width: 30px; height: 20px;" type="text"/>	I was not ready to get a job	<input style="width: 30px; height: 20px;" type="text"/>	To move away from home	<input style="width: 30px; height: 20px;" type="text"/>
For the party scene	<input style="width: 30px; height: 20px;" type="text"/>	To make new friends	<input style="width: 30px; height: 20px;" type="text"/>	To have more freedom	<input style="width: 30px; height: 20px;" type="text"/>
To learn new skills	<input style="width: 30px; height: 20px;" type="text"/>	Because my friends went	<input style="width: 30px; height: 20px;" type="text"/>	I felt pressurised to	<input style="width: 30px; height: 20px;" type="text"/>

We would now like to know about your alcohol consumption at *UNIVERSITY*. Remember that this survey is confidential.

Q9: Since the start of university have you ever consumed alcohol?
 Yes No (If you answered "No" please go to question 20 on page 3)

Q10: In the last university term how often have you drank alcohol?
 Daily/ almost daily 4-5 days a week 2-3 days a week Once a week 1-3 times a month Less than once a month

Q11: Since the start of university, how often do you have 6 or more units if you are female or 8 or more units if your male in a single session?
 Daily/ almost daily 4-5 days a week 2-3 days a week Once a week 1-3 times a month Less than once a month Never
 (If you answered "Never" please go to question 14 on page 2)

Q12: Thinking about a 'typical night out' at university, where you consume 6 or more units if you are female or 8 or more units if your male in a single session, please answer the following

13a.) What time do you start drinking alcohol?
 AM/PM

13b.) What time do you arrive at the nightlife environment (bar/ nightclub)?
 AM/PM

13c.) What time do you stop drinking alcohol?
 AM/PM

13d.) What time do you leave the nightlife environment (bar/nightclub)?
 AM/PM

We are interested in your alcohol consumption *during the last term of university*. Please tell us how many alcoholic drinks you would normally consume (either at home or elsewhere) from the list below during a 'typical university week', 'fresher's period' and a 'typical night out whilst at university' if none please write 0 (zero).

	Q13: Typical university week (Monday-Sunday)	Q14: "Fresher's period" Saturday 19th- Wednesday 30th of September	Q15: Typical university night out where you consumed 6 or more units if you're female or 8 or more units if you're male
 Bottles of regular strength beer, bitter, lager or cider (e.g. Carling or Bulmers)	<input type="text"/>	<input type="text"/>	<input type="text"/>
 Pints of regular strength beer, bitter, lager or cider (e.g. Carling or Bulmers)	<input type="text"/>	<input type="text"/>	<input type="text"/>
 Bottles of strong beer, bitter, lager or cider (e.g. Stella Artois or Scrumpy Jacks)	<input type="text"/>	<input type="text"/>	<input type="text"/>
 Pints of strong beer, bitter, lager or cider (e.g. Stella Artois or Scrumpy Jacks)	<input type="text"/>	<input type="text"/>	<input type="text"/>
 Small glass of wine or glass of prosecco (125ml)	<input type="text"/>	<input type="text"/>	<input type="text"/>
 Medium glasses of wine (175ml)	<input type="text"/>	<input type="text"/>	<input type="text"/>
 Large glasses of wine (250ml)	<input type="text"/>	<input type="text"/>	<input type="text"/>
 Glasses of fortified wine or vermouth (e.g. sherry or port (not wine))	<input type="text"/>	<input type="text"/>	<input type="text"/>
 Bottle of wine 750ml	<input type="text"/>	<input type="text"/>	<input type="text"/>
 Bottle of pre-mixed drinks such as Baccardi breezer, Smirnoff Ice, WKD etc.	<input type="text"/>	<input type="text"/>	<input type="text"/>
 Single measures of spirits or liqueurs such as whisky, gin, vodka, etc. (with mixer or without i.e. shots)	<input type="text"/>	<input type="text"/>	<input type="text"/>
 Double measures of spirits or liqueurs such as whisky, vodka, a cocktail etc. (with mixer or without i.e. shots)	<input type="text"/>	<input type="text"/>	<input type="text"/>
 Bottle of Spirit 37.5%	Size of bottle		
	35cl	<input type="text"/>	<input type="text"/>
	1/2 litre	<input type="text"/>	<input type="text"/>
	700cl	<input type="text"/>	<input type="text"/>
	1 Litre	<input type="text"/>	<input type="text"/>

Q16: Thinking about the fresher's period the first 11 days of university (Saturday 19th– Wednesday 30th of Sep) how many days did you consume alcohol ?

- Every day 9-10 days 7-8 days 5-6 days 3-4 days 1-2 days I did not consume alcohol

Q17: Thinking about the last 7 days (excluding today), how many alcoholic drinks did you consume at any of these locations?

	Did not attend	None	1-2 drinks	3-4 drinks	5-6 drinks	7-8 drinks	8+ drinks
Residence hall party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Pub	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University social event	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University sports event	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nightclub	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At home (Pre-drinks)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please state).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q18: In the last university term, please tell us how often you do each of the following:

	Every time I drink	Most of the time I drink	Some of the time I drink	Never	Don't know
Start drinking alcohol in your/ friend's house before you go out for the night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deliberately get drunk at home before a night out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deliberately do not eat before going out so that you can get more drunk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drink with the intention of getting drunk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mix different alcoholic beverages in one night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bought multiple drinks because they were on offer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participated in a drinking game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q19: Do you believe alcohol consumption to be a problem amongst university students?

- Yes No Don't know

Q20: To what extent do you agree or disagree with the following statements?

Since starting university:	Strongly agree	Slightly agree	Neither agree/ disagree	Slightly disagree	Strongly disagree
My overall alcohol consumption has increased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking alcohol has been at the centre of socialising	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt some pressure to make new friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My university friends often share drinking stories with each other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to feel like I am missing out if I decide not to go out drinking with my university friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My university friends and I often laugh about how drunk we were	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My university friends often make me stay out drinking for longer than I had planned to go out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have found the responsibility that comes with university difficult	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt my university friends expect me to drink alcohol	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have found it difficult to socialise with new people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking alcohol at university has made making new friends easier	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The people I mix with now drink more alcohol than those in my home town	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My popularity with other people is important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I questioned whether coming to university was the right decision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have been able to confide in my parents if I have had any difficulties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q22: Since you started university how often have you felt the following?

	All of the time	Most of the time	Some of the time	Rarely	Never
I have felt lonely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt homesick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt stressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt depressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt overwhelmed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt nervous/ shy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have felt self-conscious	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q23: Since starting university please tell us how often if ever, you have consumed alcohol for the following reasons?

	All of the time	Most of the time	Some of the time	Rarely	Never
To feel less stressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To make it easier to socialise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To fit in with the people you are around	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because it was something you felt you were expected to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To feel more confident	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To take your mind off any problems you were experiencing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To have a good time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To increase your mood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To reduce your anxiety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because you like the feeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because you felt pressured to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
So you did not feel left out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be liked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q24: Please tell us whether you have experienced the following things more or less since you started university, compared to before you started university as a result of drinking alcohol?

	Experienced more	Experienced the same	Experienced less	Not Experienced	Don't know
Was unable to remember what happened the night before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Woke up feeling embarrassed about things you had done	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vomited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Did something which put you in a risky situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regretted a decision to engage in sexual activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Been a victim of crime	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taken recreational drugs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Had unprotected sex	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt you had spoiled someone's night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Injured yourself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smoked cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Were refused entry to a club due to being too drunk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Caused damage to the place where you live	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Got involved in a fight or heated argument	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Passed out or fainted suddenly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Missed a class/ lecture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

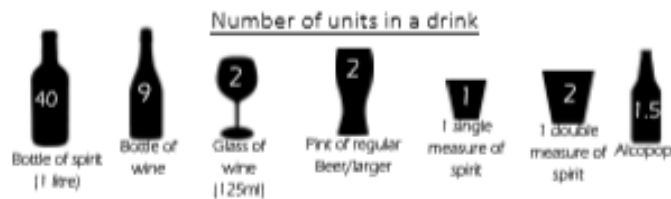
Q25: How similar do you feel your attitudes and beliefs are to individuals in the following groups?

	Very similar	Slightly similar	Dissimilar	Don't know
Typical university students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Expectations and perceptions

We are interested in how much you think other groups of people drink SINCE YOU HAVE STARTED UNIVERSITY.

For the following questions, please assume you are rating a person of your same sex.



Q26: Since starting university in September, how many units of alcohol do you think the following people consume on a typical night out? (please use the unit calculator above).

A 'typical university student'

Q27: Since starting university in September, how often do you think the following people drink alcohol?

	A 'typical university student'
Daily/ almost daily	<input type="radio"/>
4/5 days a week	<input type="radio"/>
2/3 days a week	<input type="radio"/>
Once a week	<input type="radio"/>
1-3 times a month	<input type="radio"/>
Less than once a month	<input type="radio"/>

Q28: Compared to a 'typical university student' do you think that you drink?

- More The same Less Don't know I do not drink

Now, this section of the questionnaire relates to what you were doing BEFORE MOVING TO UNIVERSITY?

Q29: Who were you living with?

- At home with parents With friends With partner On own Other

Q30: Where were you living?

- Inner city Outer city Town Village Other

Q31: What was the main thing you were doing before you started university?

- At college At sixth form Working full/ Part time Apprenticeship Gap year Other

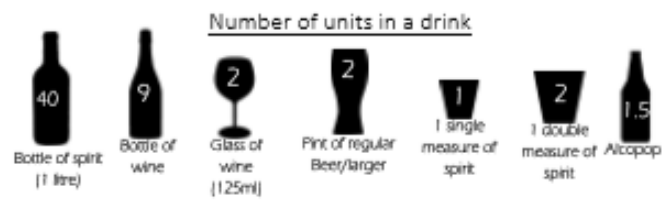
Q32: Thinking about before you moved to university how much did you agree/disagree with the following statements?

	Strongly agree	Slightly agree	Neither agree/disagree	Slightly disagree	Strongly disagree
I was worried about meeting new people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt confident of what to expect from university life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I received information about what to expect at university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt prepared to face the challenges of moving to university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt overwhelmed about the move to university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q33:	A) Thinking about <i>before you moved to university</i> , to what extent did you agree/ disagree with the following statements describing the university experience?				B) <i>Since moving to university in September</i> , to what extent do you now agree/ disagree with the following statements describing the university experience?			
	Strongly agree	Slightly agree	Slightly disagree	Strongly disagree	Strongly agree	Slightly agree	Slightly disagree	Strongly disagree
It is easier for students that drink alcohol to make friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The reward at the end of a hard week of studying at university should be a weekend of heavy drinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that students who do not go out drinking are not enjoying their university experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Missing a class due to a hangover is part of being a university student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a one night stand after an alcohol fuelled night is an accepted behaviour at university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking excessively is an important part of university life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students who drink the most are often seen as the most cool	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking alcohol is a something that every university student partakes in	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University is a time for experimentation with alcohol	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking is something students' feel like they're expected to do at university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking at home before going out is a normal part of university life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I start university I will go out drinking alcohol a lot more than I do currently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Expectations and perceptions

The next questions are based on what your estimations were of students alcohol consumption ***BEFORE YOU MOVED TO UNIVERSITY***. For the following questions, please assume you are rating a person of your same sex.



Q34: Thinking about *before you moved to university* how many units of alcohol did you think the following people consumed on a *typical night out*? (please use the unit calculator above)

A 'typical university student'

Q35: Thinking about *before you moved to university*, how often did you think the following people drank alcohol?

	A 'typical university student'
Daily/ almost daily	<input type="radio"/>
4/5 days a week	<input type="radio"/>
2/3 days a week	<input type="radio"/>
Once a week	<input type="radio"/>
1-3 times a month	<input type="radio"/>
Less than once a month	<input type="radio"/>

The next section of the questionnaire is specifically about your drinking habits ***DURING THE TWO MONTHS BEFORE YOU MOVED TO UNIVERSITY***

Q36: How often did you drink alcohol?

- Daily/ almost daily
 4-5 days a week
 2-3 days a week
 Once a week
 1-3 times a month
 Less than once a month
 Never

(If you answered "Never" you have finished the questionnaire, thank you for your participation).

Q37: How often did you have *6 or more units if you are female or 8 or more units if your male in a single session*?

- Daily/ almost daily
 4-5 days a week
 2-3 days a week
 Once a week
 1-3 times a month
 Less than once a month
 Never

If you answered "Never" please go to question 39

Q38: Thinking about a 'typical night out' during *the two months before university*, when you consumed *6 or more units if you are female or 8 or more units a single session*, please answer the following:

38a.) What time would you start drinking alcohol?

AM/PM

38b.) What time would you arrive at the nightlife environment (bar/ nightclub)?

AM/PM

38c.) What time would you stop drinking alcohol?

AM/PM

38.) What time would you leave the nightlife environment (bar/nightclub)?

AM/PM

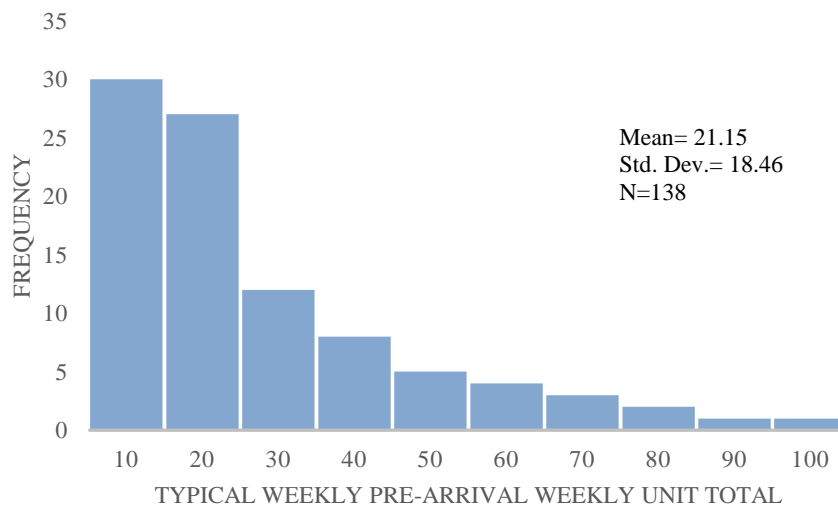
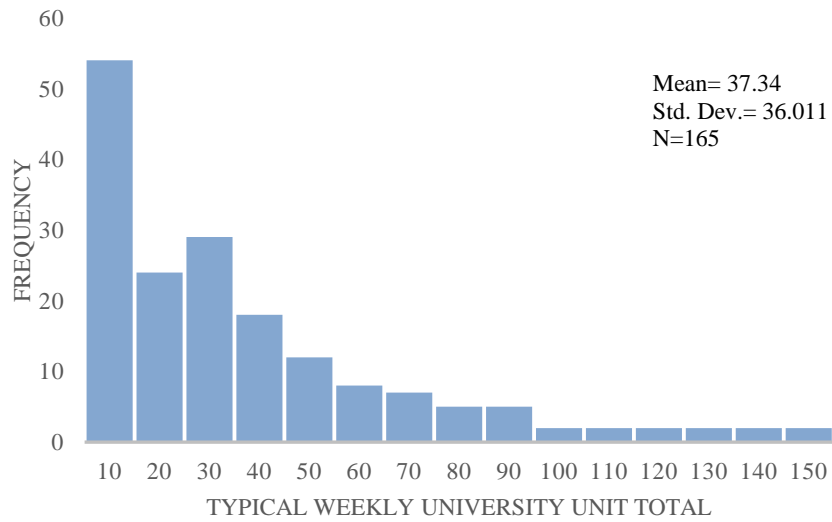
Q39: During the *two months before you moved to university* please tell us how often you did the following?

	Every time I drank	Most of the time I drank	Some of the time I drank	Never	Don't know
Start drinking in your/friend's house before you went out for the night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deliberately got drunk at home before a night out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deliberately did not eat before going out so that you could get more drunk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drink alcohol with the intention of getting drunk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mixed different alcoholic beverages in one night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bought multiple drinks because they were on offer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participated in a drinking game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about during the *two months before university*, please tell us how many alcoholic drinks you would normally consume (either at home or elsewhere) from the list below during a "Typical week before university" and "Typical night out before university" *If none please write 0 (zero)*

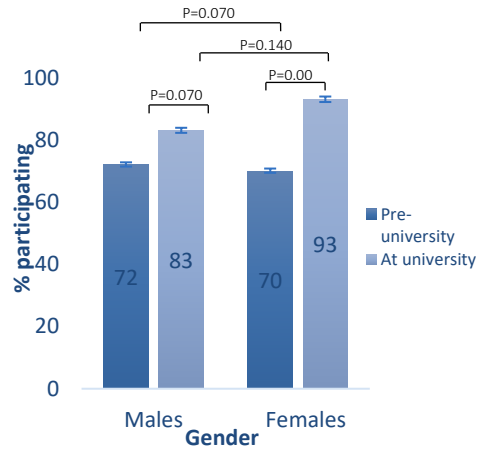
	<u>Q40: Typical week</u> (Monday-Sunday)	<u>Q41: Typical night out</u> where you consumed <u>6 or more alcoholic</u>									
 Bottles of regular strength beer, bitter, lager or cider (e.g. Carling or Bulmers)	<input type="text"/>	<input type="text"/>									
 Pints of regular strength beer, bitter, lager or cider (e.g. Carling or Bulmers)	<input type="text"/>	<input type="text"/>									
 Bottles of strong beer, bitter, lager or cider (e.g. Stella Artois or Scrumpy Jacks)	<input type="text"/>	<input type="text"/>									
 Pints of strong beer, bitter, lager or cider (e.g. Stella Artois or Scrumpy Jacks)	<input type="text"/>	<input type="text"/>									
 Small glasses of wine or glass of prosecco (125ml)	<input type="text"/>	<input type="text"/>									
 Medium glasses of wine (175ml)	<input type="text"/>	<input type="text"/>									
 Large glasses of wine (250ml)	<input type="text"/>	<input type="text"/>									
 Glasses of fortified wine or vermouth	<input type="text"/>	<input type="text"/>									
 Bottle of pre-mixed drinks such as Bacardi breezer, Smirnoff Ice, WKD etc.	<input type="text"/>	<input type="text"/>									
 Single measures of spirits or liqueurs such as whisky, vodka or cocktail etc. (with mixer or without i.e. shots)	<input type="text"/>	<input type="text"/>									
  Double measures of spirits or liqueurs such as whisky, vodka or cocktail etc. (with mixer or without i.e. shots)	<input type="text"/>	<input type="text"/>									
 Bottle of Spirit 37.5%	<table border="1"> <thead> <tr> <th><u>Size of bottle</u></th> </tr> </thead> <tbody> <tr> <td>35cl</td> </tr> <tr> <td>1/ 2 litre</td> </tr> <tr> <td>700cl</td> </tr> <tr> <td>1 Litre</td> </tr> </tbody> </table>	<u>Size of bottle</u>	35cl	1/ 2 litre	700cl	1 Litre	<table border="1"> <tbody> <tr> <td><input type="text"/></td> </tr> <tr> <td><input type="text"/></td> </tr> <tr> <td><input type="text"/></td> </tr> <tr> <td><input type="text"/></td> </tr> </tbody> </table>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<u>Size of bottle</u>											
35cl											
1/ 2 litre											
700cl											
1 Litre											
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Appendix 11: Study Two, Histogram for Normal Distribution

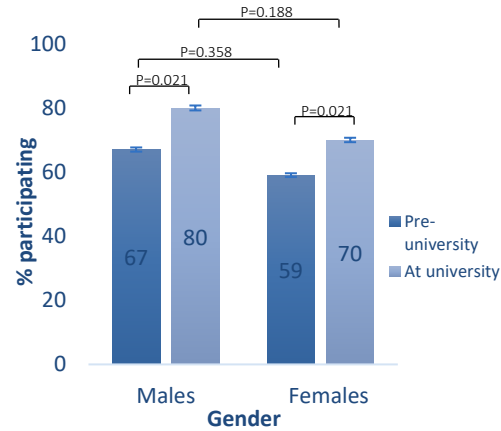


Appendix 12: Study Two, Additional Figures: Drinking practice engagement prior to and during the first term of university

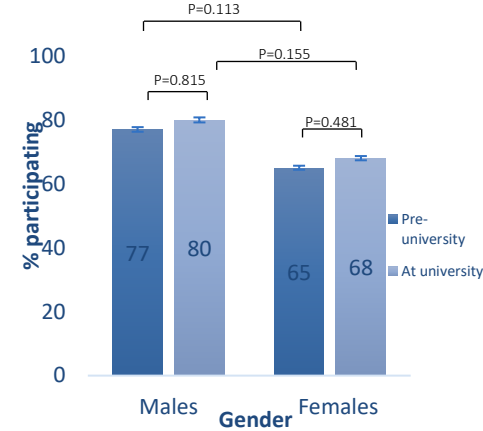
A). Preloading participation prior to and during the first term of university, by gender



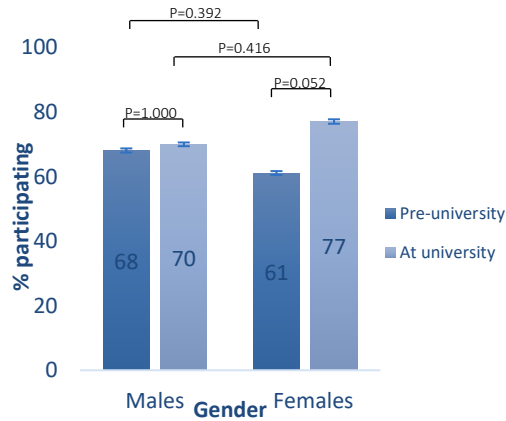
B). Drinking with intent to get drunk prior to and during the first term of university, by gender



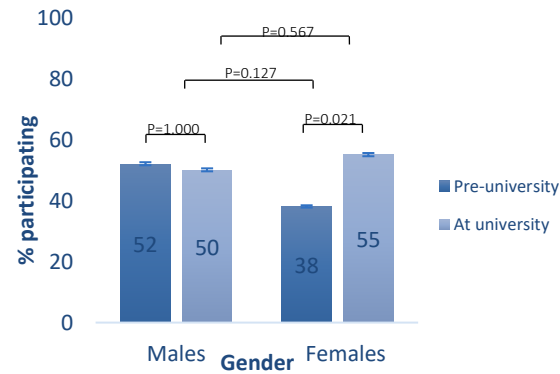
C). Mixing alcoholic beverages prior to and during the first term of university, by gender



D). Purchasing discounted larger measures of alcohol prior to and during the first term of university, by gender



E). Drinking game participation prior to and during the first term of university, by gender



Appendix 13: Study Three, Gatekeeper Email

Title of Research:

An investigation into university students' perspectives and experiences of alcohol consumption across the undergraduate life course.

Dear (name of gatekeeper),

My name is Nichola Gambles, I am a PhD student at the Public Health institute at LJMU. I am currently undertaking a research study exploring university students' perspectives and experiences of alcohol consumption across the undergraduate life course. This research is being carried out in collaboration with the National Union of Students and the Alcohol Impact scheme. To date there is paucity of research exploring university students' alcohol experiences, perspectives and alcohol related consequences throughout the university life course, it is therefore anticipated that the results collected from this study will help to further inform and develop effective student support services at university.

As part of this research I would like to recruit 30 undergraduate students to take part in paired interviews. Interviews will last no longer than 60 minutes and as an incentive for participating students will receive a £10 amazon voucher.

I am contacting you to ask if you would be willing to help recruit students to take part in the interviews by sending out the attached recruitment email to all undergraduate students on your programme. I have also attached a participant information sheet with further details about the research. This study has received ethical approval from LJMU's Research Ethics Committee: Reference number 16/CPH/025.

I would really appreciate your help with the recruitment process and ask that you email me (N.H.Gambles@2015.ljmu.ac.uk) if you are willing to take part. Please do not hesitate to contact me or my supervisor with any other questions or concerns about the study.

Thank you in advance for your assistance with this research study.

Yours sincerely, Nichola Gambles

Appendix 14: Study Three, Participant Information Sheet



Liverpool John Moores University Participant Information sheet

Title of Project: An investigation into university students' perspectives and experiences of alcohol consumption across the undergraduate life course.

Name of Researcher and School/ Faculty: Nichola Gambles, Centre for Public Health, Faculty of Education, Health and Community, LJMU.

This project has been approved by the ethics panel of Liverpool John Moores University (16/CPH/026). To take part in this research you must be enrolled as an undergraduate student at Liverpool John Moores University.

You are being invited to take part in a research study. Before you decide if you would like to take part, it is important that you understand why the research is being done and what it involves. Please take time to read the following information. Ask us if there is anything that is not clear or if you would like any more information.

6. What is the purpose of the study?

The purpose of this study is to explore your perspectives and experiences of the university drinking culture. I am interested in the role that alcohol has played during your university career and what has motivated you and your friends to drink.

7. Do I have to take part?

No. It is up to you to decide whether or not to take part. You are still free to withdraw without giving a reason. A decision to withdraw will not affect your rights / service you receive. However, once the interviews have been transcribed, it will be impossible to withdraw your information from the study.

8. What will happen to me if I take part?

This research involves taking part in an interview with a social peer, you both will be asked questions relating to your experiences with alcohol, perspectives on student drinking and your motives to drink at university. Interviews will be recorded and will last approximately 60 minutes. You will also be required to complete a short questionnaire relating to your alcohol use and demographics. The findings from this study will be used to inform and develop suitable support services for university students and research will also be shared through relevant conferences and within a peer-review journal.

9. Are there any risks / benefits involved?

The discussion around alcohol use has the potential to cause distress during and after the interview, however, if you feel uncomfortable answering some of the questions, then you are permitted to say so and we will move onto the next question. Additionally, links to alcohol services and LJMU student support services have been provided at the end of the participant information sheet.

As an incentive for taking part you will receive a £10 amazon voucher, additionally the answers you give will help inform and develop effective student support services at university. This research will therefore ultimately help to further improve student's experience at university. If there is a problem you can contact the researcher at the address below.

10. Will my taking part in the study be kept confidential?

As with all research which involves more than one participant confidentiality cannot be guaranteed, however, all participants will be asked to respect the principle of confidentiality when taking part in the interview. Additionally, all the information collected about you during the course of the research will be kept strictly confidential. Your responses will be anonymised and stored securely on a password protected computer.

This study has received ethical approval from LJMU's Research Ethics Committee: Reference number 16/CPH/026.

Contact Details of Researcher

Nikki Gambles (LJMU PhD Student) –N.H.Gambles@2015.ljmu.ac.uk

Dr Zara Quigg (Supervisor)- Z.A.Quigg@ljmu.ac.uk

Dr Lorna Porcellato (Supervisor)- L.A.Porcellato@ljmu.ac.uk

Thank you for taking the time to consider this study

If you would like information on where to get support for alcohol or substance misuse then please visit sites such as:

<http://www.liverpoolalcoholservice.nhs.uk/aboutus/>

www.addaction.org.uk

www.alcoholconcern.org.uk

studentwellbeing@ljmu.ac.uk

Appendix 15: Study Three, Consent Form



Nikki Gambles
PhD Student
Centre for Public Health
Faculty of Health, Education and Community

'An investigation into university students' perspectives and experiences of alcohol consumption across the undergraduate life course.'

1. I confirm that I have read and understand the information provided for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and that this will not affect my legal rights.
3. I understand that any personal information collected during the study will be anonymised and remain confidential.
4. I agree to take part in the interview.
5. I understand that the interview will be audio recorded and I am happy to proceed.
6. I understand that parts of our conversation may be used verbatim in future publications or presentations but that such quotes will be anonymised.

Name of Participant

Date

Signature

Name of Researcher

Date

Signature

Appendix 16: Study Three, Gatekeepers Letter

Title of Research:

An investigation into university students' perspectives and experiences of alcohol consumption across the undergraduate life course.

Dear,

My name is Nichola Gambles, I am a PhD student at the Public Health institute at LJMU. I am currently undertaking a research study exploring university students' perspectives and experiences of alcohol consumption across the undergraduate life course. This research is being carried out in collaboration with the National Union of Students and the Alcohol Impact scheme. To date there is paucity of research exploring university students' alcohol experiences, perspectives and alcohol related consequences throughout the university life course, it is therefore anticipated that the results collected from this study will help to further inform and develop effective student support services at university.

As part of this research I would like to recruit 30 undergraduate students to take part in paired interviews. Interviews will last no longer than 60 minutes and as an incentive for participating students will receive a £10 amazon voucher.

I am contacting you to ask if you would be willing to help recruit students to take part in the interviews by sending out the attached recruitment email to all undergraduate students on your programme. I have also attached a participant information sheet with further details about the research. This study has received ethical approval from LJMU's Research Ethics Committee: Reference number 16/CPH/025.

I would really appreciate your help with the recruitment process and ask that you email me (N.H.Gambles@2015.ljmu.ac.uk) if you are willing to take part. Please do not hesitate to contact me or my supervisor with any other questions or concerns about the study.

Thank you in advance for your assistance with this research study.

Yours sincerely, Nichola Gambles

Dear all,

We are currently conducting research exploring **students' drinking perspectives and experiences at university** and are seeking friends to take part in paired interviews.

The paired interviews will last no longer than 60 minutes and as a thank you for taking part you will both receive a **£10 amazon voucher**.

If you and your friend are interested or have any questions regarding the study, please contact me at the address below

Thank you,

Nikki

(N.H.Gambles@2015.LJMU.ac.uk)

University Drinking Experiences

Participate in a joint interview with a friend and get a £10 voucher each

I am a PhD student conducting research on students' alcohol experiences and perspectives of the university drinking culture.

- We are currently seeking friends to take part in paired interviews, you will be asked questions relating to you shared drinking experiences and ideas of drinking at university.
- Interviews will last no longer than 60 minutes.



If you are both interested in finding out more please
contact me: Nikki Gambles,

N.H.Gambles@2015.ljmu.ac.uk for more
information



Appendix 18: Study Three, Demographic Questionnaire

Demographic questionnaire



Q3: What is the name of your school/ college? _____

Q3: How do you prefer to think of yourself?

- Male Female Other

Q3: How old are you? _____

Q5: What is your ethnicity? White Mixed Asian Black Chinese Other Ethnic group

Q3: What is your postcode? _____

We would like to know about your alcohol consumption, please use the unit calculator to answer the questions below.

Number of units in a drink



How often do you have a drink containing alcohol?	Never	Monthly or less	2 - 4 times per month	2 - 3 times per week	4+ times per week
How many units of alcohol do you drink on a typical day when you are drinking?	1 - 2	3 - 4	5 - 6	7 - 9	10+
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

Appendix 19: Study Three, Interview Schedule

University students interview guide

Firstly, can I thank you both for agreeing to take part in this research and take a couple of minutes to go over some of the information that is found in your participant information sheet? The purpose of this study is to explore your perceptions, ideas and experiences of alcohol use throughout university. During this interview, I will be asking questions relating to your alcohol experiences, perspectives, influences and the impacts of drinking at university. Your personal opinions and views are very important to us, therefore there are no right, or wrong answers so please feel free to share your point of view even if it differs from what others have said. I am going to tape the interview so that I can remember what we have said, but nobody else will hear the tape except for myself. Lastly, your identity will remain confidential throughout the write up of this study. To ensure confidentiality please make sure that what is said in this room remains in this room. Are there any questions?

1. Ice breaker: Beliefs

So, in front of you are some Google images of university students' drinking?

- From your own experiences are these accurate representations of drinking at university? So, which of these drinking experiences have you seen or experienced yourselves at university?
- What do you think about how male and female students drinking behaviours are represented in these images? Would you say any of the images are a good representation of male students' drinking (and what about female students' drinking)?
- How would you describe male and female drinking patterns at university? Are there any differences/ similarities?

2. Prior to university: perceptions and expectations

I would like you to think back to before you started university, what were your perceptions and ideas around drinking at university, for example how often did you think students drank, how many students drank, that type of thing? Where did they drink?

- Were there any distinct groups of students that you thought drank more or less than the average student?
- Where did your knowledge and ideas around drinking at university come from?
- How did you feel about moving away from home to university? What were you excited/nervous about? What concerns did you have?
- Do you think you arrived at university with any expectations around drinking?

3. Experiences of the initial move to university

Okay, thinking back to the move to university,

- How did the perceptions you had prior to university match up with your actual experiences? What actually happened? In your opinion did students drink more or less than what you expected?
- How did you feel once you had arrived at university? What did you do to help you settle in?
- What activities did you get up to in fresher's week?
- What role did alcohol play for you during the move to university? What positive experiences did you have with alcohol at the start of university? And what negative experiences did you have?
- What were the differences between drinking at university compared to drinking back at home?
- Would say your drinking is typical of a university student or do you think you drink more/less.

4. Drinking Behaviours during the transition to university

- So if I get you to describe a *typical week* at university now, that involves alcohol, which days do you go out drinking, where might you go out drinking, that type of thing?
- So if I get you to describe a *typical night* out at university now, that involves alcohol, what time do you start drinking, do you take part in any drinking activities, what do you drink etc?
- Can you describe in a bit more detail about the drinking activities you engage in? For example, what typically happens during pre-drinks? What games do you play? What do you drink? Who do you go out drinking with? What about your course friends?
- When you go back to your hometown do the nights out and drinking practises you take part in at university differ from the nights out back at home? For example, do you go out as often, engage in drinking activities as much etc? Why do you think there are these differences?
- Okay, what is it like then if you don't want to go out drinking or if you go out but you don't drink? How do your friends react? Do they expect you to drink?
- What sorts of alcohol consequences have you experienced since being at university or what consequences have you witnessed other students' experiencing?
- Compared to before university have the consequences you have experienced through drinking alcohol changed?

5. Expectations of drinking throughout university:

- Do you expect your drinking to change throughout the rest of university? Why?

6. Influential factors on students' drinking during the transition to university?

- What are the main reasons why you think that university students drink alcohol? What role does alcohol play in socialising at university? Freedom, money, academic freedom etc.
- What aspects of Liverpool John Moores University encourage/ discourage your drinking? For example, student offers, location, not having a student bar?

7. University interventions

- In your experience how is drinking at university dealt with? Is it generally accepted at university? In your opinion is student drinking an issue for universities?

At the end, ask them if they want to add anything else and then thank them for participating.

Appendix 20: Study Three, Example of Images Provided for Paired Interviews Icebreaker Activity

