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Student Alcohol Research and Prevention Activity (SARPA): Pre-Intervention Report

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Executive Summary

Introduction

The 'Student Alcohol Research and Prevention Activity' (SARPA) project has been funded by Public Health Liverpool and aims to encourage students in Liverpool to drink less alcohol on a night out and to engage with events that have less of a focus on alcohol.

The SARPA intervention is to be research informed, thus the research team from the Public Health Institute have conducted research that will be used to inform the development of the intervention. The research has explored student drinking culture in Liverpool, as well as the prevalence of drink promotions and alternative events that are not focused on intoxication. The research has also considered approaches which would encourage students to drink less alcohol on nights out in Liverpool's City Centre. The initial data collection has included a rapid literature review, venue observations (n=20), content analysis of venue social media activity (n=12), nightlife surveys with students (n=171), focus groups/paired interviews with students (n=32 [total participants]) and interviews with key stakeholders (n=21).

Literature Summary

Despite evidence suggesting that alcohol consumption rates in the UK are falling (Chapman, 2016) there are groups in society that are still engaging in risky drinking practices, such as binge drinking (Butler et al, 2017; Public Health England, 2016). Binge drinking is a behaviour which is often considered to be common and socially acceptable for students (Dodd et al, 2010; Ham et al, 2003; Neighbours et al, 2007; Quigg et al, 2013). Social norms around drinking within the student population are an important consideration as to why binge drinking has become commonplace; excessive drinking now has an important role in socialising and reinforcing peer group identity (Anderson, 2013; Griffin et al, 2018). Furthermore, purchasing alcohol from an off-licenced premise and consuming it at home before going on a night out (preloading) is also common with the student population and contributes to students consuming harmful levels of alcohol (Gant and Terry, 2017; Quigg et al, 2013).

Research has highlighted how drink promotions can influence behaviour and lead to binge drinking and increased alcohol consumption in consumers, including young adults (Trawley et al, 2017). Drink promotions within nightlife venues influence student's expectations about the amount they will drink, and will also encourage them to remain in a venue and consume drinks that are on promotion (McClatchley et al, 2014). Furthermore, marketing material that students receive during fresher's week will often include information about drink promotions (Fuller et al, 2017). Social media plays a key role in the marketing and promotion of alcoholic drinks (Fuller et al, 2017) and will use lifestyle and cultural references to engage with specific groups such as students (Atkinson et al, 2015, 2016; McCreanor et al, 2013).

Key Findings

This research has highlighted the following:

- Binge drinking is normalised within Liverpool's student population. The students who took
 part in this research consumed high quantities of alcohol and were frequent users of
 Liverpool's night time economy. Alcohol consumption was seen as an important part of
 student culture as it played a key role in socialisation and creating shared peer group
 experiences.
- Nightlife venues in Liverpool's City Centre will use drink promotions to target students. The students and stakeholders were aware of specific venues targeting students through

designated 'student nights' which were often associated with drink promotions. This was further confirmed by the content analysis of venue social media profiles and the venue observations.

- Students who do not drink alcohol are perceived to be on the periphery of mainstream student culture. In general, students who did not drink alcohol were perceived to be missing out on social events. This was because they were not part of the shared peer group experiences that involved alcohol consumption. Whilst the student participants considered not drinking on a night out to be acceptable, they were reluctant to abstain from alcohol if they were in traditional nightlife venues (i.e. pubs, bars and clubs).
- Students are unlikely to consume non-alcoholic drinks when visiting nightlife venues. The
 nightlife survey and student focus groups demonstrated how non-alcoholic drinks were not
 considered to be value for money. When students did have a non-alcoholic drink during a
 night out it tended to be tap water. Students were also reluctant to consume non-alcoholic
 drinks in nightlife venues as it would go against cultural norms.
- Activities that offer an alternative to visiting traditional nightlife venues appeal to students. Students appeared to be keen on engaging with a range of activities where the focus would not be on alcohol consumption (for example film nights, quizzes). Students highlighted the fact that socialising was their primary concern as well as the events providing value for money. Stakeholders listed a number of similar activities that they had previously organised that they perceived to be popular with students. Students felt that alternative events with less of a focus on alcohol consumption would be more likely to encourage them to drink less than promotions on non-alcoholic drinks in nightlife venues.

Conclusion

Students in Liverpool drink alcohol as a means of bonding with peers and creating shared experiences. Students in Liverpool will often pre-load before going on a night out and will consume levels of alcohol that are above the Chief Medical Officer guidelines for low risk drinking. Promotions on alcoholic drinks are prevalent throughout nightlife venues in Liverpool's City Centre, and students will often take advantage of these promotions. Furthermore, students are unlikely to drink non-alcoholic drinks whilst on a night out as they are not perceived to offer value for money. Students reported a lack of activities that do not involve alcohol in Liverpool, although many would be keen to partake in such activities if they took place outside of traditional nightlife venues.

Summary of Recommendations

- A multi-agency and multi-component approach, that enhances existing approaches, is required for the SARPA intervention. Excessive alcohol consumption amongst the student population is a multi-faceted issue and a number of key stakeholders have important roles in encouraging students to drink less alcohol on a night out (for example those who manage nightlife venues, student unions, student halls of residence and those who work in student health and well-being services). It is important that stakeholders work together to address the issues of drinks promotions, as well as to provide events that offer an alternative to nights out consuming alcohol. Furthermore, the SARPA intervention needs to be viewed by partners as a long term approach that links in with other work programmes/activities within their institution and across the city.
- The SARPA intervention needs to target pre-loading as well as drinking in nightlife venues. Pre-loading is evident within the student population and will often lead to binge drinking. It is important that this type of drinking is addressed by the SARPA

intervention through health related messages that educate students about the risks associated with excessive alcohol consumption and by facilitating events that would offer an alternative to drinking. The role supermarkets and off-licences surrounding university campuses have in potentially facilitating pre-drinking through promotions of alcoholic drinks also needs to be explored.

- The timing of the SARPA intervention needs to be considered. Whilst fresher's week
 is an important time for new students, which the intervention should target, it is also
 important to consider other times of the year when students may be more liable to
 take notice of public health messages, for example during exam periods, and engage
 in activities (e.g. following holiday periods).
- The overall culture of intoxication within the student population needs to be considered and addressed in order to make the SARPA intervention sustainable. Whilst this would be difficult to overcome in a single intervention it is important that those designing the SARPA intervention consider the role alcohol has in student culture and design an intervention that incorporates different elements which complement the student experience, for example through promoting activities where students can make friends and bond with peers. The intervention needs to promote the positive experiences that students have when they attend events that do not have an alcohol focus.
- Events that take place outside of traditional nightlife venues need to be considered as well as diversifying the activities on offer in traditional nightlife venues. Students were unlikely to attend events in nightlife venues that did not involve alcohol consumption at all and therefore the SARPA intervention needs to consider alternative settings. Activities that take place within traditional nightlife settings but do not have a focus on alcohol and provide a distraction from drinking excessively are also important and nightlife venues should be encouraged to consider this.
- The SARPA intervention should ensure that consistent and complementary messages about the harms of excessive drinking are delivered across partners, work programmes and intervention activities. Furthermore, it is important that, if soft drinks are promoted in nightlife venues, this does not further facilitate illicit drug use or students bringing their own alcohol into nightlife venues.
- Promotions of non-alcoholic drinks need to be more prominent in advertising material and need to offer value for money. Students did not demonstrate much awareness of promotions of non-alcoholic drinks and implied that non-alcoholic drinks did not offer value for money. The SARPA intervention needs to ensure that non-alcohol drink promotions are more prevalent and that they appear to offer better value for money compared to promotions that include alcoholic drinks. The social acceptability of consuming non-alcoholic-drinks (including water) should be promoted.
- The SARPA intervention should include continuous assessment and monitoring of student trends, which in turn should be used to update and develop the ongoing SARPA programme. It is important that the SARPA intervention continues to monitor and adapt so that it keeps in line with the changing nature of student culture.
- The use of social media in the SARPA intervention should be considered, as it plays a key role in the student experience. Students will often use social media to find out about upcoming local events. Thus, the SARPA intervention should consider how to utilise social media in order to promote events that offer an alternative to nights out involving heavy alcohol consumption and to promote public health messages.

1. Introduction

1.1 Student Alcohol Research and Prevention Activity (SARPA)

The 'Student Alcohol Research and Prevention Activity' (SARPA) project has been funded by Public Health Liverpool and aims to encourage students in Liverpool to drink less alcohol on a night out and to engage with events that have less of a focus on alcohol. Liverpool is home to three universities: the University of Liverpool, Liverpool John Moores University and Liverpool Hope University. The city has a large student population of approximately 70,000 and across the three universities there are 27,990 students under the age of 20 (Higher Education Statistics Agency, 2017). Previous local research has demonstrated how venues will target events that encourage excessive alcohol consumption at specific groups including students (Atkinson et al, 2015; Quigg et al, 2013). Furthermore, the vulnerability of new students is of concern. In 2016 at both the University of Liverpool and Liverpool John Moores University there were approximately 43 incidents of violent or sexual assaults per 1000 residents (The Complete University Guide, 2016).

This new intervention would complement existing work programmes and interventions in Liverpool, such as Liverpool City Council's existing Drink Less Enjoy More intervention (Butler et al, 2017; Quigg et al, 2018) which has aimed to target excessive alcohol consumption in nightlife across Liverpool's City Centre. It is anticipated that both Liverpool John Moores University and the University of Liverpool, as well as selected nightlife venues in Liverpool's City Centre and other partners, will run some components of the intervention. SARPA is overseen by a multi-disciplinary steering group, which includes stakeholders from Public Health Liverpool, licencing, Liverpool John Moores University, University of Liverpool, The Guild of Students, Liverpool Student Union and nightlife venue managers/owners.

The SARPA intervention is to be research informed, thus the research team from the Public Health Institute (PHI) have conducted research presented in this report that will be used to inform the development of the intervention. A mixed method study has been carried out to collect data that will be included in this report and provide measurements that can be used as a comparison when evaluating the success of the intervention¹. The initial data collection has included a rapid literature review, venue observations (n=20), content analysis of venue social media activity (n=12), nightlife surveys with students (n=171), focus groups/paired interviews with students (n=32 [total participants]) and interviews with key stakeholders (n=21) (see Appendix 1 for full methodology and Appendix 2 for study limitations).

1.2 Research aims and objectives

The research presented in the report has aimed to address the following:

- To explore the role that alcohol has in student culture and to gain an understanding of alcohol consumption patterns and levels of students in Liverpool;
- To understand the availability and promotion of non-alcoholic drinks in venues that target students in Liverpool's City Centre;
- To understand the options that are available to students in Liverpool's City Centre that are not focused on intoxication; and,

¹ This is the first of two research reports that will be produced by the PHI as part of the SARPA project. The second report will explore the development and implementation of the SARPA intervention (s), and where applicable early indications of the projects impact. This report will be produced in 2019.

• To explore what would encourage students to drink less alcohol on nights out in Liverpool's City Centre.

2. Literature Review

2.1 Current UK and local drinking culture

There is evidence to suggest that drinking cultures in the UK are changing. In the past twenty years the number of people drinking alcohol in the UK has fallen; the average level of consumption has also declined (Office for National Statistics [ONS], 2016). ONS data demonstrated that in 2015 people aged 16 to 24 years were as likely as those aged 65+ to report that they were teetotal. Furthermore, the proportion of those in aged 16-24 who reported binge drinking² at least once in the previous week has fallen by more than a third since 2005 (from 29% to 18%) and frequent drinkers by two-thirds, down to one in 50 young adults (ONS, 2016). However, there is still evidence that suggests that people within this age group are participating in risky drinking practices, such as binge drinking. In 2016, of those young people aged 16 to 24 in Great Britain who had drank during the previous week, 24% of men and 29% of women drank more than 12 and 9 units respectively on their heaviest drinking day (Drinkaware, 2016).

There is also evidence to suggest that drinking practices in terms of drinking locations has changed. Between 2009 and 2012 household spending on alcoholic drinks increased by 1.3%, whilst spending on alcohol consumed outside of the home fell by 9.8% (Health and Social Care Information Centre, 2015). This suggests that more people are purchasing alcohol from off-licenced premises and are consuming it in the home environment and are therefore drinking less in nightlife venues. This is a cause for concern as research has demonstrated the general public are largely unaware of how much alcohol constitutes a unit and are therefore likely to overserve when pouring their own drinks (Gill and O'May, 2006; Hasking et al; 2005).

Binge drinking is of particular concern in Liverpool; estimates for the years 2011-14, for harmful alcohol consumption in Liverpool are worse than both the England and North West average (Public Health England, 2016). Research with nightlife users in Liverpool has demonstrated high levels of alcohol consumption, including units that have been consumed prior to entering the nightlife environment (primarily at home, i.e. pre-loading). A survey carried out with 181 nightlife patrons in 2016 found that 71% of participants had pre-loaded prior to entering the nightlife environment, and the median number of units consumed during pre-loading was 4.7 (Butler et al, 2017). The median number of units that participants consumed/expected to consume over the course of their night out was 16, and whilst this was lower than previous years (Butler et al, 2017), it is still above the Chief Medical Officers guidelines for low risk drinking (Department of Health, 2016).

2.2 UK student drinking culture

Binge drinking is a behaviour which is often considered to be common and socially acceptable for students (Dodd et al, 2010; Ham et al, 2003; Neighbours et al, 2007; Quigg et al, 2013). Drinking within the student population is seen as a way to make friends and reinforce social bonds (Atkinson et al, 2015; Mackinnon et al, 2017). The National Union of Students (NUS) Alcohol Survey (2016) found that out of 13,451 students, 48% thought that getting drunk would mean that they will have a good night out, although paradoxically 76% claimed that they didn't need to get drunk in order to have a good time. Social norms around drinking within the student population are an important consideration as to why binge drinking has become commonplace; excessive drinking now has an important role in

² The Chief Medical Officers' guidelines for both men and women is that they should not drink more than 14 units of alcohol a week and that these should be spread over three or more days (Department of Health, 2016). Drinking in excess of 6 units of alcohol in a single session is classed as binge drinking.

socialising and reinforcing peer group identity (Anderson, 2013; Griffin et al, 2018). Whilst there have been numerous public health campaigns that have aimed to reduce binge drinking in the general population, they often do not resonate with the student population who see alcohol consumption as a traditional aspect of student life and thus, because it is normalised, they do not usually identify as problematic drinkers (Anderson, 2013).

Pre-loading is a key part of student drinking culture in the UK. A 2017 study of 604 UK students found that 59% of participants (males, 57%; females, 61%) had pre-loaded alcohol before visiting town centre venues (Gant and Terry, 2017). Furthermore, a questionnaire completed by 227 students attending commercially organised pub-crawls found that 90% of respondents had pre-loaded before going out (Quigg et al, 2013). Students pre-load as it reduces the cost of their night out (Gant and Terry, 2017) and it provides an opportunity to socialise and bond with peers (Atkinson et al, 2015; Gant and Terry, 2017).

Young people, including students, will often associate cultural and social capital with drinking practices (Atkinson et al, 2015; Järvinen and Gundelach, 2007). The concepts of social and cultural capital are based on Bourdieu's (1984) wider framework of 'capital'. Social capital refers to the importance of social networks, in this case the social networks that students create with peers at university. Cultural capital refers to the meaning attached to cultural artefacts (such as alcohol) and behaviours (such as drinking practices). Cultural capital is often used by individuals to gain position within social hierarchies and is therefore essential in acquiring social capital. Hence, students would have to participate in what is considered to be 'normalised' drinking culture to obtain the correct cultural capital. This in turn would influence their relationships with other students thus obtaining social capital.

Students who do not drink alcohol are often considered to be in contrast to the norm (Conroy and de Visser, 2014; Herring et al, 2014). Research with international students who do not drink alcohol and who attend UK universities, has found they can feel intimidated when faced with UK student drinking culture (Bloxham et al, 2009; Thurnell-Read, 2018). Students who do not drink alcohol are faced with the challenge of negotiating their way through social environments which often come with pressure to drink and be part of the group; they can be perceived as being different and they may not accepted as part of the peer group (Conroy and de Visser, 2014). This has the potential to alienate these students from their peers and reduce their opportunities to interact with other students in a social setting. Students who are new to university, and thus unfamiliar with their new peers, in particular may struggle to articulate their reasons for abstaining from alcohol. Research has shown that nondrinking students found it easier to justify their behaviour by claiming they did not drink for health reasons, and some students avoided social occasions that involved alcohol (Conroy and de Visser, 2014). In contrast, some students who do not drink have embraced this identity through categorically informing peers that they do not drink at all. Conroy and de Visser found that this approach, rather than claiming to 'not drink very often' was beneficial to these students as it helped to prevent peers from encouraging them to have a drink (Conroy and de Visser, 2014). The idea of being firm and retaining authenticity with being a non-drinker helped some young people to stay in control of their lives and keep their identity (Conroy and de Visser, 2015).

2.3 Drink promotions

Promotions of alcoholic drinks are prevalent across the UK. Research has highlighted how drink promotions can influence behaviour and lead to binge drinking and increased alcohol consumption in consumers, including young adults (Trawley et al, 2017). Promotions of hedonistic products associated with identity formation, such as alcohol, encourage impulse purchasing (Pettigrew et al, 2015). These

types of promotion will often appeal to students. Research has also shown that attending a venue where alcoholic drinks are on promotion influences students' expectation about the amount of alcohol that they will drink (Christie et al, 2001). Further it will also encourage patrons to remain in an establishment and purchase drinks that are on promotion (McClatchley et al, 2014).

Results from a recent study in the UK, on marketing material given out during a fresher's fair highlights that much of students social activities occur in pubs, bars or night clubs, with many alcohol promotions encouraging students to attend and drink alcohol (Fuller et al, 2017). Fuller et al (2017) found that out of 85 handouts that included a drink promotion, 94% were for alcoholic drinks and 6% were for non-alcoholic drinks. This highlights how alcohol consumption can become normalised within student culture through the exposure students have to alcohol as well as alcohol promotions.

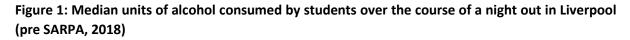
Social media has an important role in shaping young people's expectations about drinking practices (McCreanor et al, 2013; Moreno et al, 2009a, 2009b). Research has explored the way alcohol brands use social media to promote their products (Atkinson et al, 2015, 2016; Brooks, 2010; Mosher et al; 2012; Nicholls, 2012). Often this is done through association with certain identities and drinking practices that will appeal to particular groups in society. Research has shown that brands that want to engage with young people, such as students, will often elude to lifestyle and cultural identities that would resonate with young people (Atkinson et al, 2016). Fuller et al (2017) also highlighted the occurrence of alcohol-related incentives, which were offered to students attending a fresher's fair that encouraged interaction with venue social media.

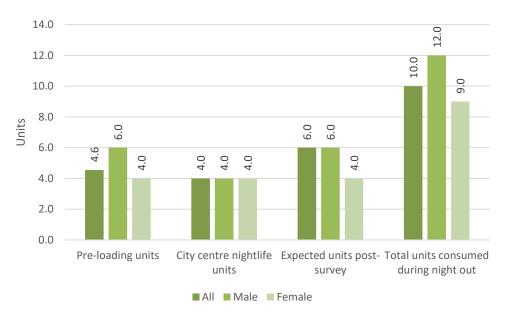
There is a dearth of evidence about the impact that promotions of non-alcoholic drinks can have on student drinking cultures. However, in the UK there have been some examples of interventions and events that have aimed to encourage people to drink less alcohol. Nudging Pubs project in London aims to help bars/pubs change their behaviour towards their customers and create a more inclusive pub/bar atmosphere for non-drinkers or people who want to drink less alcohol. The website allows bars/pubs to self-assess their low and non-alcoholic drink choices which is used alongside customer reviews/ratings etc. In addition to this there are nine nudges that the pubs/bars can work on: ambience, functional design, labelling, presentation, sizing, availability, proximity, priming and promoting (Tolvi, 2016; Nudging Pubs, 2016). Research by Herring et al (2014) has highlighted examples of successful events, for example tea parties and quiz nights, that appeal to young people but do not have a focus on intoxication. There is also an emerging trend of alcohol free music and dance events within the UK, such as Morning Gloryville (Oxford Brookes University, 2017). This is an early morning immersive dance party, with coffee, smoothie and yoga bars and has attracted some well-known dance artists to play, such as Fatboy Slim (Morning Gloryville, 2018).

3. Findings

3.1 Student drinking in Liverpool

Findings from the student nightlife survey indicated that the majority (89.5%) of students surveyed had drank alcohol prior to completion of the survey. Furthermore, 94.7% of students surveyed were intending to consume alcohol following the survey. Over a third (35.0%) of male participants and a quarter (26.0%) of female participants reported pre-loading, with the overall median number of units³ consumed being 4.6 (6.0 for males; 4.0 for females). Of the participants who had pre-loaded, 69.6% had purchased the alcohol from a supermarket. The median number of units consumed in Liverpool's nightlife venues prior to completion of the survey was 4.0 for both males and females. Males expected to consume a further 6.0 and females a further 4.0 units post survey). In total, participants expected to consume 10 units of alcohol over the course of their night out (males 12; females, 9) (Figure 1).





Almost two-thirds (64.5%) of the sample were classified as a regular user⁴ of Liverpool's nightlife. In the qualitative data collection, students discussed their drinking behaviours. Responses varied as to how often the participant's went out drinking in Liverpool's City Centre. The majority of the students drank alcohol and discussed going out in Liverpool's City Centre on a regular basis in addition to attending parties.

"Because student night is Thursdays isn't it, so it's [drinking] through the week and at the weekend as well. We drink a lot in the flat" (Student)

³ To calculate the amount of alcohol consumed by nightlife patrons, drinks were coded into standard UK units using the following conversion: small glass (125ml) of wine, 1.5 units; standard (175ml) glass of wine, 2.1 units, large (250ml) glass of wine, 3.0 units; pint of lager/beer/cider, 2.0 units; bottle of lager/beer/cider, 1.7 units; can of lager/beer/cider, 2.0 units; bottle of alcopops, 1.5 units; single (25ml) shot of spirits, 1.0 unit; and a pitcher of cocktail, 6.0 units.

⁴ Go on a night out in Liverpool's City Centre once a week or more.

"We go to *** like twice or three times a week, even if it's just for like a round of cocktails for £5. So three cocktails each and then we can come back and drink here. So it's just kind of *** because it's so close. But clubbing we do that basically once a week" (Student)

"There's like parties every night" (Student)

Some students reported that they did not have a regular drinking pattern, and would go out at certain times of the year more often, for example during fresher's week or when they have spent time away from their friends at university.

"The first few weeks [of university] it was 3 or 4 times, it was quite a lot" (Student)

"I think when you come back to uni from when you have been away on holiday, over Christmas, when you come back you're with all your mates again so you will go out a couple of times. Even at fresher's you're going out a couple of times a week over the two weeks" (Student)

"It's mainly when you first get here you get that big calendar and it's got all the different clubbing days and things like that and there's three a week, so it's very prevalent" (Student)

This highlights the important role that alcohol has within student culture, as it plays a key part in socialising with peers.

A minority of students, in particular those that were older, discussed infrequent drinking due to commitments such as work and family. These students commented on the fact that they were not necessarily stereotypical students.

The majority of the student participants who did drink and frequently went out in Liverpool's City Centre explained how pre-loading formed a key part of their nights out. These students cited several reasons why they pre-loaded including reducing the cost of a night out, to build confidence before going out and to socialise and bond with peers.

"I think the cost definitely does comes into it and then it's just the social side of it as well, meeting up with your mates before you actually go out" (Student)

"So most people will stay [at home] until 11 or 12 [pm] and have loads of drinks so there's less to buy in town" (Student)

"It's cheaper and you have a good bond with people before heading out" (Student)

"It's having that merry feeling and getting themselves prepared before they go out" (Student)

The concept of drinking to socialise was particularly important to many of the students and was seen as a key facilitator in making new friends during fresher's week.

"It's just so much easier [during fresher's week] because when everyone has had a drink they're more confident, so you're more likely to go up to someone and start a conversation" (Student)

A small number of the participants who did not drink or were infrequent drinkers when they started university discussed how they initially struggled during fresher's week because of this, as they found it difficult to join in and make new friends as the majority of the activities involved alcohol. The majority of these participants discussed how they did start drinking more alcohol as it made socialisation with their new peers easier. One participant who had maintained her non-drinking status

explained that this was made easier as her roommates in student halls did not pressure her into drinking.

"Thankfully I was put with flat mates so they didn't pressure me into drinking or anything like that" (Student)

"I remember going a bit more sober into a club and I didn't enjoy it personally" (Student)

"I felt like I was missing out" (Student)

In general, there was a lack of confidence amongst the students in going against their peer group norms when it came to abstaining from drinking alcohol on a night out. This was not necessarily due to peer pressure, but more of a need to feel part of a shared experience of which alcohol consumption played a key role.

"I think mostly people drink because other people drink as well, so they just want to follow or else they don't feel they would fit into the group" (Student)

This was further reflected in the discussions during which the students reflected on their perceptions of other peers who did not drink alcohol and who appeared to struggle with fitting in to university life. The students were generally sympathetic towards these students and expressed empathy in terms of their own fears that they might not have fitted in and how that would have made adjusting to university life difficult.

"I was actually talking to a girl on my course today and she said she is very alone and isolated because she doesn't drink" (Student)

The normalisation of student alcohol consumption was discussed by both students and stakeholders during the qualitative data collection, with both groups recognising the important role alcohol has in student culture.

"A lot of people come to uni just for the nightlife and just put their degree on the back burner" (Student)

"I wouldn't be surprised if quite a lot of students choose Liverpool to go to university because of the nightlife being so great" (Stakeholder - Student Outreach)

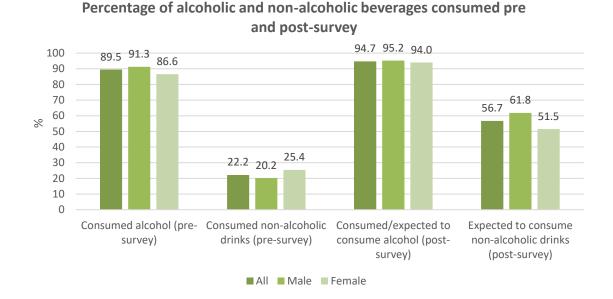
"I think for some students it's a case that they go out to *** or wherever because it's the social thing to do" (Stakeholder - Bar Manager)

The normalisation of alcohol consumption on nights out was also reflected through the findings from the nightlife survey. Less than a quarter (22.2%) of the students who took part in the nightlife survey had consumed a non-alcoholic⁵ drink prior to completion of the survey⁶ and 29.2% intended to consume a non-alcoholic drink later in the evening (Figure 2).

⁵ Mixers that had been consumed along with an alcoholic drink would not be included.

⁶ Since their night out had begun.

Figure 2: Percentage of participants who consumed alcoholic and non-alcoholic drinks pre and postsurvey (pre SARPA, 2018)



The majority of the students who took part in the focus groups discussed how they would rarely drink non-alcoholic drinks whilst on a night out. The main reason cited for this was that they considered nights out to include alcohol consumption and were concerned that they may not fit in with their peers if they were seen consuming a non-alcoholic drink. Furthermore, soft drinks were not considered to be value for money.

"I wouldn't pay for it [soft drink]" (Student)

"I feel like it's not that much cheaper [to get a soft drink] so you may as well get an alcoholic drink" (Student)

A small number discussed purchasing a soft drink or water on the way home from a night out in an attempt to lessen their hangover the following day.

"I always get a bottle of water when I go back" (Student)

"Yeah I always get something to lessen the effects the next day" (Student)

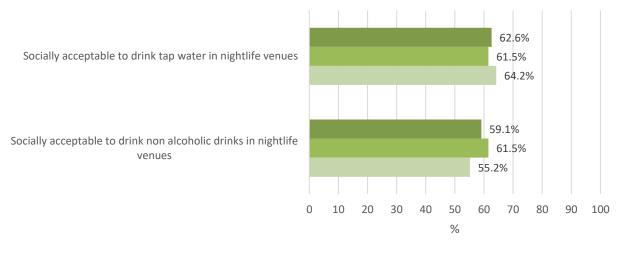
However, when asked about the social acceptability of consuming non-alcoholic drinks on nights out the majority of the students who took part in a focus group stated that they thought it was acceptable and that they would not pass judgement on their peers if they chose to do so.

"If one of my friends didn't want to drink I would be like 'that's fine I'm not bothered'" (Student)

"Perfectly fine [not to drink alcohol], people do what they want" (Student)

This was reflected to an extent in the data from the student nightlife survey, in which two-thirds (62.6%) of participants believed it was socially acceptable to drink tap water and 59.1% thought it was socially acceptable to drink a non-alcoholic drink in nightlife venues (Figure 3).

Figure 3: Perceived social acceptability of drinking tap water and non-alcoholic drinks in nightlife venues (pre SARPA, 2018)



All Male Female

The stakeholders who worked closely with students in a university setting reflected on some of the events that were ran through the student societies and had less of a focus on alcohol, such as film nights. Whilst these were popular with some students, it was noted that these type of events may only appeal to certain students and that they did not always have wider appeal.

"These tend to be very small groups, tightly bonded, so they don't have the wider pull from outside of these groups" (Stakeholder - Bar Manager)

In general, stakeholders tended to think that students who did not drink alcohol would be less likely to engage with venues in Liverpool's night time economy. It was noted that some of the main reasons some students did not drink alcohol were religious/cultural and that it was possible that these students did not engage in mainstream university or leisure activities.

"There are one or two little establishments dotted around the city which mainly cater for particular groups of people, particular communities, that are open later in the evening and typically they're Middle Eastern, Muslim communities... But that's a particular community and I don't think there's a more general offer out there that I'm aware of" (Stakeholder – Police)

"I think we do generally find that quite a lot of students who don't drink are not as engaged with us as we'd like them to be" (Stakeholder – Student Outreach)

Stakeholders listed a number of harms and costs associated with student alcohol consumption. These mainly included the cost of policing and dealing with crime, Accident and Emergency department (A&E) attendances, as well as damage to property such as student accommodation. Some stakeholders also highlighted the impact that heavy and excessive alcohol consumption could have on academic achievement.

"A lot of those flat parties get out of hand. They invite people back that don't even live in their flat. Those people don't actually care about the property so they will trash the flat, put holes in the walls. Obviously those charges go back to the students." (Stakeholder – Student Accommodation Manager)

"Every October we see a spike in crime around fresher's week. A spike in violence, spike in thefts and spike in sexual offences, and it is basically the return of the students" (Stakeholder – Police)

"There's the impact on the student's ability to study effectively which from my perspective is really important, they're only here for a short period of time - if they drink too heavily and they're not able to focus on their studies they lose those opportunities very considerably" (Stakeholder – Student Advice and Wellbeing Services)

"Students who become drunk, they can't find their way back, they're not familiar with getting themselves around the city or getting a taxi. They can put themselves in vulnerable positions" (Stakeholder – Student Welfare)

Students demonstrated some awareness of the costs and harms associated with alcohol consumption. They cited A&E attendances, being vulnerable to crime, impact on academic achievement and putting strain on relationships with flat mates as potential consequences of alcohol consumption.

"I know a guy who was absolutely smashed and this guy stole £230 from him" (Student)

Issues around illicit drug use were also discussed by some of the stakeholders. Some stakeholders were concerned that students who drank alcohol were also more likely to put themselves in more risky situations and also take illicit drugs. Further, a number of stakeholders recognised that whilst some students may not drink alcohol on a night out, it was possible that they were intoxicated as a result of using other substances.

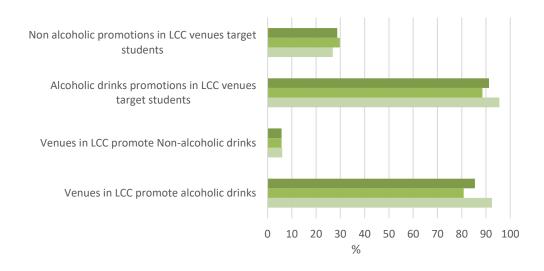
"There is an increasing number of students who are going out and not drinking alcohol but are taking drugs instead" (Stakeholder – Outreach Manager)

"They [students] get themselves into situations that they possibly wouldn't get themselves into if they hadn't had a drink and with the increase in alcohol consumption it gets them more perceptible to trying recreational drugs" (Stakeholder – Accommodation Manager)

3.2 Drink and events promotions in Liverpool's nightlife

Across both male and female nightlife survey respondents, 39.2% had purchased an alcoholic drink on the night of survey that was on promotion. The majority (71.7%) of these respondents reported that these drinks were 'cheap drinks'. Males (83.8%) were more likely to have purchased 'cheap drinks' than females (52.2%; p<0.01) and females were more likely to have purchased drinks included in a multi-buy offer (43.5% compared to 13.5%; p<0.01). Participants in the nightlife survey also thought that nightlife venues in Liverpool's City Centre promoted alcoholic drinks (85.4%) and that venues would use these promotions to target students (91.2%). Only a small number of participants (5.8%) thought that nightlife venues in Liverpool's City Centre promoted non-alcoholic drinks (Figure 4).

Figure 4: Participants perceptions of nightlife practices and promotions in Liverpool City Centre venues (pre SARPA, 2018)





Drink promotions were also evident throughout the content analysis of venue social media sites with 20% (n=384 out of 1881) of posts including an alcoholic drink promotion. Of these, 46% (n=176) were promoting cheap drinks, 28% (n=106) were promoting alcoholic drinks alongside food⁷ and 21% (n=81) were promoting multi-buy offers on alcoholic drinks. Furthermore, 19% (n=348) of the total number of posts promoted an event at the venue and 89% (n=311) of these posts included information about alcoholic drink promotions, whilst only 7% (n=22) included information about non-alcoholic drink promotions, often these promotions included a drink alongside a meal, for example a free tea or coffee when purchasing a breakfast. Six out of the 12 venues included a reference to alcoholic drinks in their venue description. Only one venue did not have any posts about drink promotions.

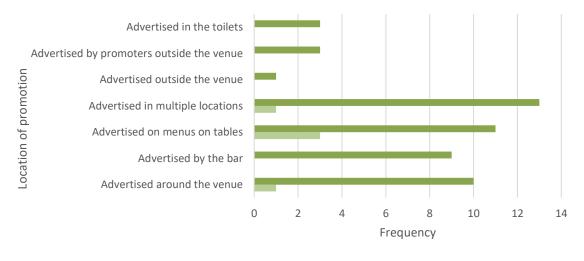
"Brilliant drink offers - £3 Double Vodka Mixers//£2 Jagerbombs//£2 Bottles//£2 Shooters//£4 Double House spirits and mixers" (Social media post – Venue 12)

"Sunny Sunday Sesh! Get in the courtyard & enjoy 241 cocktails all day! Plus live music from 5pm #sundayfunday #*** #courtyard #livemusic" (Social media post – Venue 4)

Data collected throughout the venue observations found that 14 out of 20 (70%) venues advertised cheap alcoholic drinks, 14 out of 20 (70%) venues advertised multi-buy offers on alcoholic drinks and 6 out of 20 (30%) venues offered a drink promotion alongside a meal. Half (50%) of the venues advertised alcoholic drinks around the venue. There were few instances of non-alcoholic drinks being promoted around the venues for example, only 3 out of 20 venues advertised promotions of non-alcoholic drinks on menus (Figure 5).

⁷ Often it became apparent that soft drinks were available as an alternative to alcoholic drinks in these type of promotions. However, for the most part this information was not included in the main text.

Figure 5: Location of promotional material for alcoholic and non-alcoholic drinks in Liverpool's City Centre Venues (pre SARPA, 2018)



Alcoholic promotions Non-alcoholic promotions

Students who took part in the qualitative data collection reiterated that promotions of alcoholic drinks were common in Liverpool's City Centre nightlife venues that were popular with students. They discussed how they would often attend venues on specific nights as they had alcoholic drinks that were on promotion. In comparison, the students reported a lack of promotional material relating to non-alcoholic drinks.

"I think with the promoters they definitely draw you in, as you walk in saying that you are going to one club and like you're heading there and someone comes over and says they have got an offer in there and hand you a voucher you'd probably go" (Student)

"We went to *** once and they were giving out a free bottle of Prosecco and normally I don't drink Prosecco when I'm out, but because it was free I was like 'let's go in here'" (Student)

"You never see anything advertised like 'you can get a coke for £1' or something, you never see that" (Student)

Stakeholders also expressed concern about the prevalence of drinks promotions in Liverpool's City Centre venues.

"We've recently had a venue where we took them to task over levels of drunkenness...they were selling cocktail jugs... in reality what was happening was someone was getting a cocktail jug and just getting it for themselves, and then their mates were getting cocktail jugs and they were just sitting there drinking from the jug" (Stakeholder – Police)

"Instead of buying a single it would be cheaper to buy a double, so people are always getting a bit more in their drink" (Stakeholder – Student Accommodation)

Participants in the qualitative research discussed how venues would often use promotions of alcoholic drinks to promote their venue and any special events.

"So the better the promotion the more chance the students are going to go to their bar than another bar" (Student)

"I think they try and appeal to students not having much money so they try and make it as cheap as possible, so putting on more drinks deals to get people to have more shots" (Student)

Further, it was apparent though the content analysis that venues used social media to target students, especially during fresher's week, for example between 4th September to 25th September 2017 10% (n=63 out of 640) of posts specifically mentioned fresher's week. Furthermore, 5% (n=85 out of 1881) of posts referred specifically to students.

"FRESHERS MADNESS #freshers #itsliverpool #student cards" (Social media post – Venue 2)

"Are you ready? We are!!! #rerturnoffreshers #goingtobeepic" (Social media post – Venue 3)

*"*** Liverpool and *** Matthew Street. The best Student Card deals in Liverpool" (Social media post – Venue 2)*

Social media was seen as being an important promotional tool by participants who took part in the qualitative discussions. Students who were new to Liverpool in particular discussed how they would often use social media to find out about local venues and events. Social media was also a means of finding out about the different drink promotions that venues might have which in turn could potentially influence where they went on their nights out in Liverpool's City Centre.

"I search Facebook, I just type in Liverpool events and I think Facebook is programmed to filter all of them through" (Student)

"[Student venues are] advertised on Facebook as well" (Student)

"I would say nowadays those [nightlife venues] who are targeting students will target them via social media" (Stakeholder – Alcohol Researcher)

"They [nightlife venues] are offers driven, they are spamming Facebook feeds and Twitter feeds with offers and that type of thing" (Stakeholder – Student Welfare)

"I feel like that [social media] is probably the main platform which students will access...social media is key so I feel it is the most important way to get advertising across" (Stakeholder - Bar Manager)

Furthermore, students also discussed engaging with other students via social media prior to starting university. They explained how some students would share their expectations of how much they would go out and how much they would drink. Some of the students recognised that this could cause some people to feel uncomfortable if they were unwilling to engage in similar drinking practices.

"I remember in the *** group chat before I even moved here, there was a chat that was created and it was some people who were obviously apprehensive about drinking were like 'I don't think I'm going to drink' and then the other people who were like the popular ones who were going to go to all the clubs kind of roasted them a little bit" (Student)

In addition to social media, some of the students who took part in the qualitative data collection also described being approached by promoters outside of venues who would cite drinks promotions and provide them with free drinks vouchers (usually shots).

"People who hand out the little vouchers as well so you'll get this free drink if you go in and buy another drink" (Student)

"Everywhere you go in town people hand out them shots. I said to my mates one day I'm going to go to town and not take any money and just see how drunk I can get off every one of them cards" (Student)

The researchers who conducted the venue observations also experienced this on five occasions during data collection.

3.3 Incentives to drink fewer alcoholic drinks

Participants of the nightlife survey were asked to indicate from a list of five pre-determined statements⁸ what would potentially motivate them to drink more non-alcoholic drinks on a night out. Saving money (40.0%), being healthier (35.1%) and avoiding a hangover (31.6%) were the most popular options overall, with some variations between genders (although none of statistical significance) (Figure 6). Other incentives to drink more non-alcoholic drinks on a night out that were suggested by the participants included: 'being on antibiotics', 'driving', 'mental health', 'taste', 'don't feel like drinking', 'friends also sober', 'cultural', 'playing football the next day', 'better music', 'campaigns' and 'bar staff offering these drinks'.

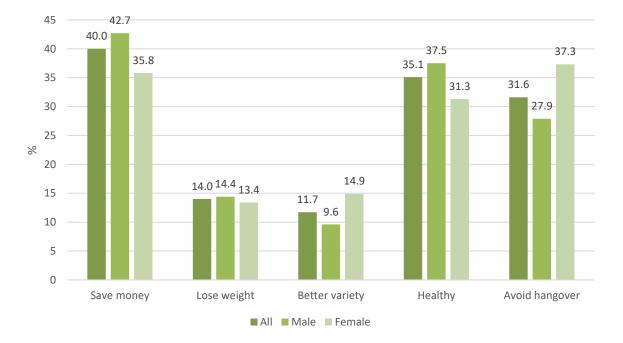


Figure 6: Perceived motivations to drink more non-alcoholic drinks on a night out (pre SARPA, 2018)

Throughout the qualitative discussions with students, saving money was not generally discussed. Instead, the concept of drinks and activities being 'value for money' came through as an important consideration for the participants. Several of the participants stated that they were unlikely to purchase a non-alcoholic drink on a night out because they did not perceive them to be value for money, although they did acknowledge that they were cheaper than alcoholic drinks. Furthermore, those who did not drink or who occasionally drank alcohol also discussed some frustration with the prices of soft drinks in nightlife venues.

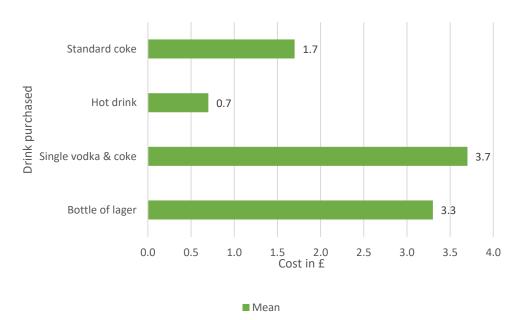
"They do different styles of cocktails like £2 cocktails, £2.50 cocktails, so there's not much in it at the ***. A £2 cocktail is not much more than a pint of coke" (Student)

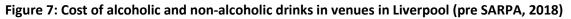
⁸ Participants could select more than one, and were able to cite 'other' as an option.

Furthermore, mock alcoholic drinks, such as 'mocktails' and non-alcoholic beer were unpopular with the student participants, mainly because they did not perceive them to be value for money.

"Say you were going to make the [non-alcoholic] cocktails orange and cranberry juice, I feel like I can do that at home by myself for much less money" (Student)

Findings from the venue observation showed the cost of selected alcoholic and non-alcoholic drinks (Figure 7). The mean cost of a single vodka and coke was £3.70 and prices ranged between £2.50-£5. This demonstrates a wide pricing variation between venues; however, this may have partly been due to different brands of vodka being used as the 'house' option. In two of the nightlife venues visited, a single vodka cost the same or was more expensive than a double measure. The average cost of a glass of coke was £1.70, although different venues offered different sized servings which may have impacted on the price. The average cost of a bottle of standard lager was £3.30 and the price ranged from £1.50 to £3.50. Hot drinks were available in half of the nightlife venues visited and the prices ranged from 99p to £2. Two of the nightlife venues had facilities to make hot drinks but the researchers were told that they were unavailable at the time when the venue was visited⁹. One venue had tap water available on the bar for customers to serve themselves.





All of the nightlife venues that were observed stored soft drinks lower down than alcoholic drinks. Alcoholic drinks were more likely to be placed within the customer's eye line and were more likely to be part of a display. Furthermore, with the exception of venues that would be classed as 'pubs'¹⁰ the majority of the soft drinks available were traditional mixers that would usually be served with spirits.

Less than half (48.5%) of nightlife survey respondents reported that they thought Liverpool's City Centre had nightlife venues without a focus on alcohol that would appeal to students. A small number of students in the focus groups discussed attending events that had less of a focus on alcohol consumption; those that did were positive about the experience.

⁹ All observations took place during hours of typical student nightlife activity (i.e. between 7pm and 1am).

¹⁰ Venues that tended to be more casual in style, close earlier and serve food.

"The formal, even though we had one glass of wine, it was just a nice event for us to go to and dress up for. We didn't have to drink to enjoy that" (Student)

Some stakeholders discussed events that they had organised that had provided an alternative to a night out in Liverpool's City Centre.

"Our film and pizza night, there was a really good turnout" (Stakeholder – Assistant Accommodation Manger)

"The NUS had a pancake night, so everyone just got in their pyjamas and came over and made pancakes and it was a really good social event" (Stakeholder – Alcohol Researcher)

A key element discussed by stakeholders and students that appeared to make these type of events popular was the social aspect. Furthermore, they tended to take place outside of traditional nightlife venues and thus did not necessarily have to contend with the normalisation of alcohol consumption.

3.4 The SARPA intervention

The importance of SARPA not encouraging other consumption practices that could have a detrimental effect of student's health was noted by some of the stakeholders. The levels of sugar in soft drinks was of concern to one of the stakeholders. Another stakeholder was concerned that the intervention could potentially have unintended consequences if students misinterpreted health messages, for example the calorie content of alcoholic drinks.

"I know these sort of fancy elderflower fizzy cordials have high quantities of sugar in them to make them taste nice. So it's just being aware of what is the potential knock on effect" (Stakeholder - Alcohol Researcher)

"Liverpool City Council came to fresher's fair and compared measures of alcohol with food, so I think there were doughnuts and pizzas and some of the girls were horrified. Now obviously we want to encourage a healthy approach to calorie intake because that can also be an issue at university" (Stakeholder – Student Advice and Wellbeing Services)

As discussed in previous sections, students who took part in the qualitative discussion emphasised that 'value for money' was their key concern when planning leisure activities. Stakeholders were also aware of this. Some students discussed going on nights out and drinking alcohol due to boredom, and expressed that they would be keen to take part in alternative activities if they appeared to be value for money. Students often cited going to the cinema as a possible alternative to going out drinking, but they felt that this was an expensive activity that did not offer value for money.

"I think things like games nights or like a cinema sort of thing that didn't cost a fortune" (Student)

"[The intervention should] offer different activities like cinema things but at reduced prices" (Student)

"Students are looking to get the best value out of their money whilst they go out and have a good time" (Stakeholder – Student Advice and Wellbeing Services)

Events that focused on food were also cited as potential alternatives to nights out drinking by both students and stakeholders. Students were keen on these types of events as they felt they offered a similar opportunity to bond and socialise with new friends as nights out drinking. Stakeholders who had been involved in organisation of such events felt that they had proved popular with students and, whilst alcohol had been available, drinking was not the primary focus of these events. Distraction was seen as a key concept within these type of events as alcoholic drinks may still be available, but those participating would potentially be engaged with other activities and thus consume less alcohol than

they normally would on a night out. Social media was seen as an important method of communication to ensure that students were aware of these events.

"*** is such a huge venue, actually they do a food thing every so often on a Friday and it's like food focused" (Student)

"You see videos on Facebook of Wacky Warehouses for adults and if it said no drinking I would be like sound that would be a boss night out with all your mates just having a laugh. I would rather do that than go to town and spend loads of money, there's just some more fun things to do" (Student)

"I think social media helps that in some ways, there's opportunities for them to see what else is going on where it's not about drinking" (Stakeholder - Student Welfare)

As discussed in pervious sections, the role alcohol consumption has in student culture is vast, and participants in the qualitative data collection emphasised that the SARPA intervention should not underestimate this. There was a consensus that the message of SARPA should not be to tell students that they should not drink alcohol, but that they should be encouraged to consider alternative drinks or events that do not focus on intoxication.

"I think that was something that came up when we were having our meetings was the word 'non-alcoholic' – it shouldn't be not involving alcohol, it should just be an event. It's kind of implying that it's encouraging the norms like this is not normal because there's no alcohol involved" (Stakeholder – Student Outreach)

Furthermore, stakeholders who were experienced in delivering health interventions to students felt that a more holistic approach would be needed for SARPA, with one suggesting that it might be beneficial to deliver alongside other student health campaigns.

"What we find is if we can incorporate specific campaigns into wider campaigns often that can have a better effect...And sometimes I think the ability to look at it holistically can make it easier for students to digest" (Stakeholder – Student Wellbeing Services)

Stakeholders who worked in nightlife venues also recognised that students would sometimes take drugs in their premises or would bring in their own alcohol. In general, the stakeholders felt that it was important that the intervention did not further facilitate illicit drug use or students bringing their own alcohol into nightlife venues by making nights out cheaper.

"In work you've got to kick them [students] out for having drugs or bringing their own alcohol in or being too drunk and refusing them" (Stakeholder – Bar Manager)

Furthermore, stakeholders highlighted the fact that nightlife venues may be reluctant to be involved in the SARPA intervention if it had an impact on their revenue.

"Definitely a money perspective, because obviously because the bars and the clubs - that's what they're there for, they're there to sell alcohol and to get people through the door" (Stakeholder – Property Manager)

"You exist to sell your products don't you, so if you were doing things where you didn't sell your products you wouldn't last very long in business" (Stakeholder – Director of Operations)

Multi-agency collaboration was viewed as a way of overcoming some of the potential barriers to SARPA to ensure that suitable events were organised in appropriate venues. A range of stakeholders were identified that had an interest in the issue of student alcohol consumption and that could

potentially have a key role in the design and implementation of the SARPA intervention, including venue mangers, the police and those who worked in student health and wellbeing services.

"I think it would have to be a combination between the universities and also the city council deciding that they're going to invest in setting these types of things up and providing venues for them to take place in" (Stakeholder – Alcohol Researcher).

"I think the stakeholders across the city region would be universities, student's unions, Merseyside Police, other emergency services who have to react, providers of accommodation in the city, whether that be private landlords or owners of larger accommodation, bar and restaurant owners, club owners, that type of thing. I think there's a huge number of stakeholders in the city that have a vested interest one way or the other in this matter" (Stakeholder – Student Advice and Wellbeing Services)

"The Student Union, bar operators, the universities themselves, the police, licensing, the bar owners in town and the night life economy. Student welfare I think because this is essentially about the student's themselves looking after their own health but also being more productive in their time in university as well" (Stakeholder - Public Health Neighbourhood Manager)

This multi-agency approach was considered to be important in addressing the nuanced nature of student intoxication culture. Those who are involved in creating the student experience, such as accommodation providers, health and well-being services and those who arrange social events all have a key role in designing, implementing and influencing the overall student experience.

4. Discussion

The findings from the data collection support existing literature (Dodd et al, 2010; Ham et al, 2003; Neighbours et al, 2007) around the normalisation of alcohol consumption within the UK student population. In general, the students who took part in the study reported drinking alcohol on a regular basis and to a level that would be classified as binge drinking. This was further reflected through the venue observations and social media content analysis, which highlighted the extent to which drink and event promotions in Liverpool's City Centre are targeted towards the student population. Further, venue observations highlight the lack of visibility of non-alcoholic drinks behind bars, with alcoholic drinks often being prominent through visual displays that are placed within customer's eye line. Students are aware of this targeted promotion; those who took part in the focus groups were able to name several club nights that were considered to be 'student nights' and the nightlife survey demonstrated that students are of the opinion that venues in Liverpool's City Centre will use drink promotions to target them specifically.

The information disseminated from nightlife venues in Liverpool's City Centre was key in shaping the students perceptions of the city's nightlife culture, and several of the students discussed receiving promotional material during Fresher's Fair as well as via social media. In addition to this, the students promoted their own 'intoxication culture' through social media (for example private Whats App group discussions) prior to starting university during which they would discuss their expectations of the nightlife culture and their intended intoxication levels. This demonstrates how alcohol consumption within the student population has become normalised, as there is generally an expectation that students will reach high levels of intoxication, in particular during their first year at university. Further, this also supports findings of previous research that has demonstrated how social media has an important role in shaping young people's expectations about drinking practices (McCreanor et al, 2013; Moreno et al, 2009a, 2009b). This is further exasperated by the promotional material that students receive, which confirms the role that alcohol is seen to have in UK student culture. The normalisation of alcohol consumption is therefore a key concern for the SARPA intervention, and could be difficult to overcome because of the way intoxication is embedded in student's expectations of university life.

The stakeholders identified a number of harms that they felt were caused by high levels of student drinking (such as increased vulnerability and impact on academic attainment). Whilst students were aware of a number of harms associated with alcohol consumption, they also recognise the important role it has in the creation of shared peer group experiences (Mackinnon et al, 2017). This notion supports existing literature that has discussed and demonstrated the role that social drinking practices have in group identity formation and the creation of 'social capital' through drinking (Atkinson et al, 2015; Järvinen and Gundelach, 2007). For the most part, students generally felt that those who did not drink alcohol potentially struggled to fit in with mainstream university life. One student who did not drink discussed how she had been able to maintain her abstinence through support from peers and her own confidence in her identity as a non-drinker. Further, the student's reflections on the experiences of those who did drink but lacked this confidence to abstain from drinking when they wanted to suggested that they felt these students lacked the social capital needed to be part of mainstream student life. This further supports the notion put forward by Conroy and de Visser (2015) about the importance self-confidence has when maintaining a non-drinking identity in a culture where alcohol consumption is normalised. The role that alcohol has in socialisation is an important consideration for the SARPA intervention. It is imperative that the intervention does not underestimate the need for shared experiences amongst students, and especially for those who are just starting university and are trying to make new friends. The intervention will need to find a way to compliment the socialisation process whilst providing new ways for students to bond that have less of a focus on alcohol.

The nightlife survey and student focus groups suggested that students are unlikely to consume nonalcoholic drinks on a night out. This was generally due to non-alcoholic drinks not being considered to be value for money by students. When they do have a non-alcoholic drink it tends to be tap water as it is freely available. Whilst it is mandatory that tap water is available across UK nightlife venues, only one venue visited during the observations carried out for this study had tap water available for customers to serve themselves and it would have had to have been requested in all other venues. The students who took part in the focus groups generally appeared to be willing to drink tap water as they thought it would potentially lessen the effects of their hangover the next day. It is possible that if tap water was more accessible, for example available for self-service, then more students will drink it in between alcoholic drinks. This would potentially be more successful than offering a wider variety of non-alcoholic drinks that students would have to pay for, as students were generally unwilling to spend money on such drinks and nightlife survey findings implied that variety would not necessarily be an incentive.

Students appeared to be keen on engaging with a range of activities where the focus would not necessarily be on intoxication. Stakeholders listed a range of alternative events that they had organised (for example food festivals, quiz nights, film nights) that they perceived to be popular with students. However, students only reported a small number of similar events that they had attended. It is possible that the activities reported by stakeholders had appealed to a minority of students that were not necessarily representative of the student population in Liverpool. The events that students perceived to be appealing had a strong social aspect and it was felt that it would be imperative to incorporate these types of events into the SARPA intervention. Student participants highlighted the fact that socialising was their primary concern as well as the events providing value for money. There was a general consensus that events that offered an alternative to going out in traditional nightlife venues would be more successful in encouraging students to drink less alcohol than reduced prices of non-alcoholic drinks in nightlife venues. The concept of being in nightlife venues and drinking nonalcoholic drinks did not appeal to students; they perceived alcohol consumption and intoxication to be fundamental if their night out involved attending traditional nightlife venues, as not doing so would be in contrast to the social norms of their peer groups. However, if activities that enabled socialising with peers, and where alcohol consumption was not part of the norm, were available then students may be more likely to engage with the aims of the SARPA intervention. This was further reflected through themes in the stakeholder interviews, as stakeholders were unsure about nightlife venues being involved with SARPA if there was concern that they could lose profits through fewer sales of alcoholic drinks as well as making less of a profit on non-alcoholic drinks.

5. Conclusion

This report has presented findings from mixed method research that will be used to inform a local intervention that is aimed at encouraging students to drink less alcoholic drinks and more non-alcoholic drinks during nights out in Liverpool. The data presented in this report has highlighted that students in Liverpool will often pre-load before going on a night out and will consume levels of alcohol that are above the CMO guidelines for low risk drinking. Furthermore, students are unlikely to drink non-alcoholic drinks whilst on a night out. The data has also demonstrated that promotions on alcoholic drinks are prevalent throughout nightlife venues in Liverpool's City Centre, and that students will often take advantage of these promotions. Nightlife venues in Liverpool's City Centre are unlikely to have promotions on non-alcoholic drinks.

Students in Liverpool drink alcohol as a means of bonding with peers and creating shared experiences. This is especially important when students first start university and need to make new friends in an unfamiliar environment. Students reported a lack of similar activities that do not involve alcohol in Liverpool, although many would be keen to partake in such activities if they took place outside of traditional nightlife venues.

6. Recommendations

The SARPA intervention needs to be multi-component in its design and should aim to implement a shift in the attitudes towards student alcohol consumption. The intervention needs to address the expectation that new students have towards intoxication culture at universities in order to influence their drinking behaviours. The SARPA intervention will need engagement from local universities, as well as the local community where accommodation and nightlife venues are situated in order to address the overall culture of intoxication in the night time economy, as well as the elements that specifically relate to students. Furthermore, it is important that the intervention is research informed, thus, based on the findings presented in this report the following recommendations have been made:

- A multi-agency and multi-component approach, that enhances existing approaches, is required for the SARPA intervention. The findings demonstrate the important roles that different stakeholders would have in encouraging students to drink less alcohol on a night out. Those who are involved in the design and promotion of student events and those who manage nightlife venues within Liverpool will have a key role in implementing the intervention through the design and promotion of events and activities that have less of a focus on alcohol consumption as well as through promoting non-alcoholic drinks to students. Further, those who are responsible for student health and wellbeing will also be imperative to the intervention through the health messages they disseminate to students. This is vital to ensure that alternatives to alcoholic drinks and events which focus on alcohol consumption are available to students, and that students get relevant and appropriate public health messages in relation to excessive alcohol consumption. It is important that the intervention is addressed 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. This would help to address the multi-faceted issue of student intoxication culture. The SARPA intervention needs to be viewed by partners as a long term approach that links in with other work programmes/activities within their institution and across the city. Members of the SARPA steering group should consider who within their organisations would be best placed to support the intervention and ensure that they are engaged with the overall project. Existing resources that could be used for the SARPA intervention should also be considered in order to reduce potential costs.
- The SAPRA intervention needs to target pre-loading as well as drinking in nightlife venues. Evidence from the literature review and data collection shows that pre-loading is prevalent within the student population and that students consume large quantities of alcohol at home or at house/hall parties before going on a night out. Stakeholders were conscious of the increased alcohol intake that is often associated with pre-loading and staff who worked in student halls of residence and student bars cited examples of when students who had pre-loaded caused damage to property. Thus, it is important that this type of drinking is addressed in the planned intervention, for example through promotional material (such as posters) being placed in strategic locations that are often frequented by students (such as university buildings, halls of residence, bars, etc., as well as online). Furthermore, those designing the intervention also need to consider the role that supermarkets and off-licences surrounding university campuses have in potentially facilitating pre-drinking through promotions of alcoholic drinks. Students also need to be more 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 wellbeing, as well as their night out. Therefore, health related messages from the universities will be key in educating students about the health harms associated with pre-loading. These could be delivered online through university and student union social media as well as at events that take place during fresher's week (for example to raise awareness of what constitutes a unit of alcohol) and throughout the rest of the academic year. It is also import that students are made aware of other potential consequences, such as damage to property and subsequent financial penalties if parties in halls of residence get out of hand.

- The timing of the SARPA intervention needs to be considered. The data demonstrated that fresher's week is an important time for new students to make friends and socialise and that drinking alcohol often plays a key role within socialisation. It is crucial that the intervention includes more targeted offers that challenge the normalisation of alcohol consumption during fresher's week as well as following breaks (e.g. Christmas and Easter) when students have been away from university and are likely to want to engage in social events in order to catch up with friends. The intervention should also recognise other time periods when students may be more open to accepting public health messages, such as exam periods when students may wish to improve their concentration, reduce stress and anxiety levels, and develop better sleeping patterns. The SARPA steering group need to consider what elements of the intervention might be suitable at certain times of the academic year. Individual universities may have existing health and well-being events that the SARPA intervention could be incorporated into, for example designated health and well-being week and mental health awareness week. Furthermore, public health messages from the universities about alcohol consumption need to be consistent throughout the academic year. This would help to ensure that excessive alcohol consumption during certain time periods, such as fresher's week, does not appear to have been normalised by the universities.
- The overall culture of intoxication within the student population needs to be considered and addressed in order to make the SARPA intervention sustainable. Wider academic literature has demonstrated the culture of intoxication that exists within the UK student population. The data collected for this project supports this notion which is evidenced through the qualitative and quantitative data collection with students, as well as the venue observations and social media content analysis. The SARPA intervention should promote the positive experiences that students have when attending non-alcohol focused events to encourage participation and break social norms that suggest students' only go out and drink alcohol at university. It is crucial that events and activities implemented during fresher's week have a social aspect and provide opportunities for students to bond, as shared experiences are a key part of the overall student experience. This was a priority for the students who took part in the research and highlighted fresher's week as being an important time to make new friends.
- Events that take place outside of traditional nightlife venues need to be considered, as well
 as diversifying the activities on offer in traditional nightlife venues. The SARPA intervention
 should ensure that all cultural and social activities that are promoted by the universities
 include a breadth of activities that are available to students of a night, and weekend days
 across the Liverpool City region (and beyond). Students cited activities which would provide a
 diversion from drinking, such as going to the cinema and playing crazy golf, as alternatives to
 going out drinking but did not always feel that these activities were affordable. The findings

also suggested that labelling events as 'non-alcoholic' might not appeal to the mainstream student population, but that students were willing to engage in events where intoxication was not the main focus. It was noted by both students and stakeholders that students would be unlikely to abstain from drinking in nightclubs and therefore the different elements of the intervention need to be appropriate to different nightlife settings. Stakeholders discussed having hosted several events such as film and quiz nights that did not involve heavy alcohol consumption and reported that they had been successful. Furthermore, pubs, bars and nightclubs also have a potential key role in reducing student alcohol consumption. Many venues now offer some opportunities (such as bingo and video games) that have less of a focus on alcohol and provide a distraction from drinking. Nightlife venues that wish to engage with the intervention should consider providing more varied activities that are less focused on alcohol consumption.

- The SARPA intervention should ensure that consistent and complementary messages about the harms of excessive drinking are delivered across partners, work programmes and intervention activities. Furthermore, it is important that, if soft drinks are promoted in nightlife venues, this does not further facilitate illicit drug use or students bringing their own alcohol into nightlife venues. It would also be of benefit for the findings of SARPA to be shared with other UK universities in an attempt to address the culture of intoxication in universities across the UK as well as those based in Liverpool.
- Promotions of non-alcoholic drinks need to be more prominent in advertising material and need to offer value for money. In order to encourage students to consider consuming more non-alcoholic drinks on a night out and to attempt to make them more appealing to students the intervention needs to consider the cost and availability of these products. The data collected through the venue social media content analysis and the venue observations demonstrated that there were some promotions of non-alcoholic drinks, often alongside food promotions. However, this would often be as a side note and tended to not feature in the main text in the promotional material. Further, student participants did not demonstrate much awareness of promotions of non-alcoholic drinks. Therefore, in order to engage students with these promotions, options that include a non-alcoholic drink would need to be more prominent and appear to be better value for money if being offered alongside a promotion that included an alcoholic drink, for example 'meal deals' that include a drink could be reduced in price if the selected drink was non-alcoholic. The intervention should include the promotion of messages in the night time economy that are targeted at students which suggest that drinking non-alcoholic drinks (including water) on a night out is socially acceptable and that doing so could save you money and lessen the effects of a hangover. This could also include making non-alcoholic drinks more visible and making tap water easily accessible (as appropriate for individual venues). Students were more likely to drink tap water on nights out because it is free, although some noted that it would often not occur to them to request some from the bar staff.
- The SARPA intervention should include continuous assessment and monitoring of student trends, which in turn should be used to update and develop the ongoing SARPA programme.
 Following the initial implementation of the SARPA intervention, the research team from LJMU will conduct an evaluation to measure the initial impact and provide further recommendations for the ongoing implementation. However, it is also important that the SARPA intervention continues to monitor and adapt so that it is kept in line with the changing

nature of student culture. Further, it is important to monitor other trends that may be an alternative to alcohol consumption but also cause potential health risks within the student population, such as the use of other substances.

The use of social media in the SARPA intervention should be considered as it plays a key role in the student experience. Students discussed how they would often use social media to find out about local events and that it was particularly important during their first year if they were new to the city. Further, the content analysis demonstrated the extent to which nightlife venues use social media to promote their upcoming events. Students demonstrated a lack of awareness of alternative activities and therefore the SARPA intervention should consider how to best engage with students and promote these types of events, for example through increased social media posts and making use of existing social networks (e.g. social media pages relating to specialist interests). It was clear from the student focus groups that new students would often engage with promotions of fresher's week well before starting university. Therefore, it is important that activities that offer an alternative to drinking are promoted and have a significant presence on social media in order to increase awareness and encourage students to engage with these types of events. Furthermore, students discussed joining unofficial groups before starting university and would often use these new networks to plan social events for when they started. Whilst the universities are unable to prevent this from happening it is important that they create and maintain similar networks which would be easier for them to monitor and promote official university fresher's events that are in line with the SARPA intervention. Messages should focus on demonstrating the wide range of cultural and social activities available (beyond alcohol-focused activities). Social media would also be important in relaying public health messages that promote the benefits of drinking less alcohol on a night out.

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8. Appendices

Appendix 1- Methods

A mixed method approach incorporating both qualitative and quantitative methods was adopted for this study. Quantitative methods collected baseline data on student drinking behaviours and promotions of alcoholic and non-alcoholic drinks. This will be used to inform the intervention as well as provide a comparison with the post-intervention data collection. Qualitative methods provided additional context and understanding.

Social media content analysis

A content analysis was carried out on the Facebook and Twitter pages of twelve venues in Liverpool's City Centre that are popular with students. Previous research has used content analysis to inform alcohol research (Atkinson et al, 2015) by exploring how alcohol brands use cultural capital in appealing to young people. Due to the increasing use of social media by nightlife venues to promote drinks and events, the data collected through the content analysis will make an important contribution to our understanding of the promotions that students are exposed to through social media.

The twelve venues were purposely selected; students and staff who worked closely with students were consulted and the information they provided about venues that were popular with students informed the selection. Prior to data extraction, a count was taken of the number of likes/followers each of the venues Facebook and Twitter pages had in order to gauge the reach that their posts would have (Table A1). The venue's description was also noted. The data extraction involved a researcher taking screen shots of posts from September to November 2017 that involved the promotion of alcoholic and non-alcoholic drinks as well as events. Overall, there were 1,038 posts that promoted events and 384 that promoted drinks. These posts were then uploaded to NVivo11 and coded accordingly.

Venue	Platform	Number of	Number of	Type of Venue	Drinks Promotions
Number		followers	page likes		
1	Facebook	4849	4872	Student bar	Membership discounts, food promoted with alcohol, multi-buy cocktails, discounted pitchers of beer
	Twitter	1977	NA		
2	Facebook	15,976	16,086	Irish/sports bar	Student discounts, food promoted with alcohol, cheap beers
	Twitter	3599	NA		
3	Facebook	30,786	31,091	Nightclub	Student discounts, £2.50 doubles, £1 shots, booth packages
	Twitter	6990	NA		
4	Facebook	28,982	29,705	Nightclub	2-for-1 cocktails, £1 drinks
	Twitter	7455	NA		
5	Facebook	3181	3262	Chain pub	2 for £12 cocktail pitchers
	Twitter	325	NA		
6	Facebook	6622	6837	Cocktail bar	Membership discounts, £2 drinks, happy hour on cocktails
	Twitter	NA	NA		
7	Facebook	41,684	42,055	Hipster bar	No drinks offers advertised
	Twitter	43900	NA		
8	Facebook	20,673	21,029	Trendy bar	Food promoted with alcohol/soft drinks
	Twitter	2268	NA		
9	Facebook	2222	2246	Tequila bar	Cheap shots, cheap pints, double up for £1, discounted bottles of wine
	Twitter	2268	NA		
10	Facebook	7720	7805	Trendy bar	Multibuys on Prosecco, beers, shots and spirits
	Twitter	9093	NA		
11	Facebook	13,300	13,433	Student bar	£1.60 beers on Fridays
	Twitter	15500	NA		
12	Facebook	23,476	24,296	Shots/cocktail bar	£2bottledbeers/alcopops,£3doubles,£2Jagerbombs
	Twitter	10800	NA		

Venue observations

Covert observations were carried out in twenty nightlife venues in Liverpool's City Centre. Similarly to the venues selected for content analysis, these venues were purposely selected as they were deemed to be popular with local students based on consultation with students and university staff (Table A2). Unobtrusive observations of nightlife venues have been used previously to explore and evaluate nightlife harms and local interventions (Quigg et al, 2016). This project adapted the data collection tool used in these previous studies which were designed to collect data on the basic characteristics of the venue, staff and customers, as well as any drinks and events promotions. The aim of the venue observations was to determine whether the venue advertised drinks and events that appeared to encourage excessive alcohol consumption.

Researchers attended the venues in pairs on a Wednesday and Friday night in February 2018 between the hours of 7pm to 1am. The researchers would first make initial observations such as the type and characteristics of the venue and the clientele (e.g. age, gender and intoxication level). The researchers walked around the venue and gave estimates based on the venue as whole. Any drink (alcoholic and non-alcoholic) and event promotions were noted and photographed when possible. If menus were available the researchers also took note of the drink promotions included. Following this, the researchers then went up to the bar and observed the layout of the bar in terms of the placement of alcoholic and non-alcoholic drinks (taking photographs when possible) and the characteristics of bar staff. They also enquired about the cost of four drinks: a glass of coke, a bottle of standard brand beer, a single house vodka and coke and a cup of tea (unless these had previously been obtained from menus or advertising around the venue). Once the observations had concluded the researchers left the venue and discreetly completed the observation tool.

Venue Number	Type of Venue	Type of Promotions	
1	Trendy bar	NA	
2	Sports bar	£2 beer of the week, £1.50 beers, multi-buy on shots, happy hour	
3	Sports/games bar	2 shots for £6, cheap drinks on Monday	
4	Irish pub	3 shots for £8, 2 Jagerbombs for £6, food with alcohol/non-alcohol	
5	Chain pub	Take away coffee 99p, food with alcohol/non-alcohol, craft beer for $\pounds 2.59$	
6	Hipster bar	NA	
7	Dive bar	£3 house double (cheaper than single), 2-for-1 cocktails, cheap beer (£2-£3.20)	
8	Irish/sports bar	Free shots	
9	Nightclub	£2 shots	
10	Nightclub	£2 bottles of beer, single same price as double	
11	Student bar	2 for £6 cocktails, £1.60 pints every Friday	
12	Student pub	2 for £7.50 cocktails	
13	Student bar	3 for £5 cocktails, multi-buy shots, food with alcohol/non-alcohol	
14	Trendy bar	Food with alcohol/non-alcohol, 3 beers for £10, 3 bombs for £10, cocktails/mixed drinks 2 for £10 (weekdays only)	
15	Shots bar	Bottles and shots for £3, 14 shots for £25, 28 shots for £45	
16	Cocktail bar	2-for-1 cocktails, multi-buy shots, Valentine's day offers	
17	Tequila bar	£2 shots, £3 Jagerbombs, doubles bar	
18	Nightclub	Cocktail offers, multi-buys on shots	
19	Trendy bar	2-for-1 cocktails (Friday & Saturday until 10pm)	
20	Cool pub	Gin of the month £5/£7, double vodka red bull £6.70, booth packages	

Table A2: Nightlife venues included in venue observations

Student focus groups and paired interviews

Initially the study aimed to carry out focus groups with first and second year students who attended local universities. However, there were issues with recruitment and as a result, the methodology was altered to include paired interviews in addition to focus groups in an attempt to increase participant numbers. In total, four focus groups and nine paired interviews took place with thirty-two students participating. The students were aged between 18 to 38 years (the majority, n=26 were aged 18-21) and n=25 were female and n=7 were male. One participant did not drink alcohol and n=2 occasionally drank with the remaining participants identifying as regular drinkers. All participants received a £5 shopping voucher as an incentive to take part.

The focus groups and paired interviews were semi-structured in nature in order to encourage participants to expand upon their answers and provide context to their responses. The questions explored the student's general drinking behaviours such as the amount of alcohol they consume on a typical night out, whether they drink at home/a friend's house before going out and their motivations for drinking alcohol. They also considered their perceptions of the prominence and promotions of low

and non-alcoholic drinks in nightlife venues and what they think would encourage students to consume more low and non-alcoholic drinks on nights out. Additionally, the focus groups and paired interviews also considered those that did not drink/drank occasionally to elicit an understanding of how they engage with nightlife venues.

Student nightlife survey

A short survey was carried out with students in and around the nightlife areas in Liverpool's City Centre that are to be targeted during the intervention. The surveys took place on a Wednesday and Friday night between 7pm-1am during term time to maximise the sample size. Nightlife surveys have previously been used in order to obtain information about the drinking patterns of local populations as well as to contribute to the evaluation of local interventions (Quigg et al, 2016).

This survey adapted previous tools in order to gain an accurate and reliable depiction of student drinking patterns and their perceptions of drink promotions in Liverpool. The survey asked questions about their general alcohol consumption, how often they drink low or non-alcoholic drinks on a night out and their perceptions of student nightlife culture and drink and events promotions in nightlife venues. The survey was completed by 171¹¹ students (see table A3 for further demographic information).

		n	%
Gender	Male	104	60.8
	Female	67	39.2
Age group	18-21	149	87.1
	21-40	22	12.9
Year of study	1st	56	32.9
	2nd	54	31.8
	3rd	40	23.5
	>3rd year UG/Post graduate	144	8.3
	College	6	3.5
University attended	LIMU	23	13.5
	University of Liverpool	101	59.1
	Liverpool Hope University	5	2.9
	Other	42	24.6
Place of residence	Student halls	52	30.4
	Shared student house/flat	75	43.9
	Private accommodation	21	12.3
	With family	23	13.5
Regular nightlife user*		109	64.5

Table A3: Nightlife survey sample characteristics

*Go on a night out in Liverpool's City Centre once a week or more

¹¹ One survey was partially completed.

Stakeholder interviews

Semi-structured interviews were carried out with a range of stakeholders including bar managers, student union officers and other relevant professionals. During the interviews participants discussed their perceptions of student drinking patterns, the promotion and sale of low and non-alcoholic drinks to students in Liverpool and the promotion of student events that encourage excessive drinking.

Participant Number	Job Title/Role
1	Head of Student Advice and Wellbeing Services
2	Director of Membership Services
3	Director of Operations
4	Director of Marketing/Communications Manager
5	Bars Manager at Liverpool Guild of Students
6	Student Representative Officer and Vice-President at Liverpool Guild of Students
7	Public Health Neighbourhood Manager
8	Strategic Lead for Alcohol and Tobacco Control for Liverpool Public Health Department, City Council
9	Public Protection Compliance Officer
10	Researcher (with subject knowledge)
11	Outreach Manager for Liverpool Student's Union
12	Post-doc Research Fellow
13	Community Inspector for Liverpool's City Centre
14	Property Manager
15	Student Accommodation Manager
16	Head of Student Welfare, Advice and Guidance
17	Business Admin Apprentice
18	Assistant Accommodation Manager
19	Assistant Accommodation Manager
20	Deputy Accommodation Manager
21	Bar Manager

Table A4: Stakeholder job titles

Data analysis

All quantitative data were entered, cleaned and analysed in SPSS v23. Analyses used frequencies, descriptive statistics, chi-squared and Mann-Whitney U tests.

Content analysis was applied to the data collected from the social media accounts of the nightlife venues selected using QSR NVIVO11. A deductive coding frame was developed and applied to the content of the social media posts.

Thematic analysis was carried out on all of the qualitative data (focus groups and semi-structured interviews) using QSR NVIVO11. Inductive and deductive codes were applied to the data using an iterative coding technique (Neale, 2016). Common themes throughout the interviews and focus groups were identified and collated. Illustrative quotations have been used within the report to highlight and evidence these themes.

Ethical considerations

Approval for this study was obtained from the Liverpool John Moores Research Ethics Committee (17PHI006). Informed consent was obtained from all of those who took part in a student focus group/paired interview and stakeholder interview, as well as those who completed a nightlife survey. All of the data included in this report has been anonymised to ensure that individuals and venues cannot be identified.

Appendix 2 - Study limitations

There are a number of limitations in the current study that need to be considered when interpreting the reported findings:

- The research team experienced some difficulty in recruiting students to take part in the focus groups. Initially first year students were targeted, however the decision was made to also include those in their second year of study. Furthermore, the option to take part in a paired interview as opposed to a focus group was also introduced in order to aid recruitment. An opportunistic sampling method was adapted, which means that those recruited may not necessarily be representative of Liverpool's student population. Furthermore, the focus groups and paired interviews were carried out with existing peer groups. Research has shown that this approach will often provide rich data through the discourse between participants (Kamberelis and Dimitriadis, 2013), however, there is the possibility of peer influence on participant responses.
- The venues that were selected for the social media content analysis and venues observations were purposely selected in line with consultation with current students and those who work with students. However, Liverpool has a large nightlife environment and this study only included 12 venues for content analysis and 20 for venue observation. Therefore the findings are not representative of Liverpool's nightlife as a whole.
- The content analysis focused on publicly available data on venue Facebook and Twitter profiles across a three month period which included fresher's week. The inclusion of fresher's week was considered to be important in order to give an overview of the type of promotions that new students are exposed to, however this could mean that the reflection on the content analysis findings is not necessarily representative of the venues year round social media activity. Further, by only using publicly available posts it is not possible to gain an understanding of what venue marketing students are exposed to through private groups and targeted advertising on an individual level.
- 16.5% of students approached to participate in the survey refused, therefore the findings from the survey may not be truly representative of all student nightlife users. Furthermore, for ethical reasons no visibly drunk individuals were invited to participate, thus the median total of units consumed may represent an underestimate of alcohol consumption levels. The surveys were carried out in selected areas in Liverpool that are known to be popular with students, but it is possible that by focusing on these areas sections of the student population may be have been excluded.
- Both the nightlife survey and student focus groups relied on self-reported estimates of alcohol consumption and frequency of nights out drinking in Liverpool's City Centre and these were not verified.



