

# Evaluation of the Liverpool Drink Less Enjoy More intervention

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## Summary

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In the UK it is an offence to knowingly sell alcohol to, or purchase alcohol for, a drunk person (Regulated under Section 141 and 142 of the Licensing Act 2003). However, until recent times public awareness, bar server compliance and police enforcement of this legislation has appeared to be low. Critically, UK nightlife environments are often characterised by high levels of intoxication and alcohol-related harms. Excessive alcohol use damages the public's health, while managing nightlife drunkenness and associated problems such as anti-social behaviour and violence places huge demands on police, local authorities and health services. To reduce such harms an extensive range of policies and interventions have been implemented at local and national levels including high profile policing, changes to licensing laws and environmental measures to improve safety. Whilst there is some evidence to indicate that these measures may contain and manage alcohol-related harms, they do little to reduce levels of intoxication or address harmful and pervasive cultures of nightlife drunkenness.

A study conducted in Liverpool in 2013 found that 84% of alcohol purchase attempts by pseudo-intoxicated actors in pubs, bars and nightclubs were successful (i.e. alcohol was sold to the actor; Hughes et al., 2014). Studies conducted elsewhere have suggested that reductions in the service of alcohol to drunks, and associated harms, in nightlife settings can be achieved through the implementation of multi-component interventions that incorporate community mobilisation, enforcement of the laws around the service of alcohol to drunks and responsible bar server training. Thus to address the sale of alcohol to drunks in the city's nightlife, local partners developed and implemented the multi-component Say No To Drunks pilot intervention. The intervention aimed to: increase awareness of legislation preventing sales of alcohol to drunks; support bar staff compliance with the law; provide a strong deterrence to selling alcohol to drunks; and promote responsible drinking amongst nightlife users. Following an evaluation of Say No To Drunks, the intervention was further refined, broadened and implemented as a second phase in 2015 – rebranded to Drink Less Enjoy More. To inform the continued development of the intervention, the Centre for Public Health at Liverpool John Moores University was commissioned to evaluate the intervention, comparing the results to previous work.

### Key findings

#### ***Pre-intervention (phase one) nightlife user survey***

- The majority (96%) of nightlife users surveyed had consumed alcohol prior to taking part in the survey (referred to as drinkers).
- Two thirds (65%) of drinkers reported preloading and 20% en route loading before entering the night-time economy (NTE). Preloading was significantly more common in younger people and students.

- In total, median expected alcohol use amongst drinkers over the course of the night out (including alcohol already consumed and expected to be consumed post survey) was 15.7 units. Median alcohol use was significantly higher among males, non-Liverpool residents and preloaders.
- Over one in eight (13%) of all participants intended to drink more alcohol after leaving the city's nightlife (e.g. at home).
- The majority (over 70%) of participants: expected their level of drunkenness to be high when they left the city's nightlife that night; reported their ideal level of drunkenness as high; thought that the typical level of drunkenness that people reach on a night out in the city centre was high; and believed that getting drunk was socially accepted in Liverpool's nightlife.
- Over six in ten participants agreed that: bar staff in the city centre do not care if people get drunk on their premises; if someone was drunk and tried to get served alcohol on a night out in Liverpool they would usually be served; and in the city centre it is easy for people who are drunk to buy more alcohol.
- Less than half (45%) of participants correctly reported that it is illegal for a bar server to sell alcohol to someone who is drunk and only a third (33%) that it is illegal for someone to purchase alcohol for a friend who is drunk.

***Post-intervention (phase two) nightlife user survey - awareness and perceptions of Drink Less Enjoy More***

- Overall, nearly four in 10 (38%) participants reported some awareness of the Drink Less Enjoy More intervention.
- After all participants were informed about the intervention and shown an example of an intervention poster:
  - 62% agreed that the posters demonstrated that drunk people will not get served more alcohol in bars;
  - 50% agreed that the intervention made them feel safer on a night out;
  - 32% agreed the intervention would make them more likely to go on a night out in the city centre; and,
  - Over a quarter agreed that the intervention would make them drink less alcohol before (26%) or during (29%) a night out in the city centre.

***Pre (phase one) and post-intervention (phase two) nightlife user survey findings comparison<sup>1</sup>***

- The proportion of participants who correctly reported that it is illegal for a bar server to sell alcohol to someone who is drunk increased significantly (from 45% to 66%);

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<sup>1</sup> The pre and post-intervention surveys were cross-sectional and thus involved different samples (although there was no significant difference between sample characteristics).

- The proportion of participants who correctly reported that it is illegal to purchase alcohol for a drunk friend increased significantly (from 33% to 55%);
- The perceived level of drunkenness that people reach on a night out in the city centre decreased significantly (from 8.6 to 8.2);
- The proportion of participants agreeing that bar staff in the city centre do not care if people get drunk on their premises decreased significantly (from 63% to 51%);
- The proportion of nightlife users agreeing that it's hard to enjoy a night out in the city centre if you do not get drunk decreased significantly (from 35% to 23%); and,
- The total median expected alcohol consumption by drinkers over the course of the full night out increased significantly (from 16 to 20 units).

### ***Post-intervention (phase 2) bar staff survey***

- Eight out of ten (81%) participants stated they would never serve alcohol to a drunk person.
- The majority reported feeling confident in refusing the service of alcohol to a drunk person (93%) and managing drunk customers within the bar (90%).
- The majority correctly reported that it is illegal for a bar server to sell alcohol to someone who is already drunk (95%) and for a person to buy alcohol for someone who is already drunk (86%).
- Over half (55%) of respondents were aware of the Drink Less Enjoy More intervention. Of these:
  - 69% reported that since the intervention was implemented, they felt more comfortable in refusing the service of alcohol to a drunk person;
  - 74% stated they were now less likely to serve alcohol to a person who is drunk since the launch of the intervention;
  - 73% felt that the intervention had helped them refuse the service of alcohol to a drunk person;
  - 83% agreed that the intervention was effective in demonstrating that alcohol will not be served to drunks; and,
  - 46% agreed that the level of drunkenness had decreased in their bar since the launch of the intervention.

### ***Pre and post-intervention alcohol test purchases***

- There was a significant reduction in the proportion of alcohol test purchases leading to a sale of alcohol to a pseudo-intoxicated actor (from 84% to 26%) (Figure 1). In other words, while only 16% of bar servers refused to serve the intoxicated actors pre-intervention, this increased to 74% post-intervention (Figure 1).

**Proportion of alcohol test purchase attempts by pseudo-intoxicated actors resulting in the sale of alcohol, Liverpool City Centre nightlife, 2013 and 2015**



**Conclusion**

Previous studies have suggested that multi-component community based interventions can have a significant effect on reducing the over service of alcohol to drunk people and subsequent alcohol-related harms in nightlife settings. The Drink Less Enjoy More intervention implemented in Liverpool City Centre is one of the first of its kind in England, aiming to address the over service of alcohol to drunks following this evidenced based multi-component approach. Findings from the intervention evaluation are extremely positive, suggesting that since Drink Less Enjoy More was implemented, nightlife user and bar staff knowledge of the laws around the service of alcohol to drunks has significantly increased, and crucially the service of alcohol to pseudo-intoxicated actors has reduced substantially. Learning from the pilot phase and subsequent amendments to the intervention, and a greater commitment to implementing all aspects of the intervention, has served to strengthen the intervention's impact. Although wider impacts on addressing the culture of drunkenness in Liverpool's nightlife were not observed, it is important that this intervention is recognised as a crucial step in a developing body of work to prevent sales of alcohol to drunks. Importantly, this work is helping create safer and healthier nightlife environments in Liverpool, and elsewhere across the UK.



## Recommendations

- Drink Less Enjoy More should form part of an on-going work programme to address drunkenness and associated harms in the city, driven by a multi-agency steering group.
- The intervention messages, activity and outcomes should be regularly communicated across local stakeholders, including those working in and using Liverpool's nightlife, particularly during peak times for alcohol-related harms in the city's nightlife. Communication could include:
  - Reassertion that venues in Liverpool's nightlife do not, and will not, serve alcohol to drunk customers (evidenced through the pseudo-intoxicated actor test purchase methodology);
  - Commendation to those premises supporting the intervention, adhering to the law and ultimately helping develop a healthy nightlife environment that aims to promote the public's health; and,
  - The positive outcomes of the intervention (e.g. from the evaluation and future intervention monitoring).
- Bar server propensity to serve alcohol to drunk people should be regularly monitored by police, and on occasion through the use of the pseudo-intoxicated actor methodology, with appropriate responses implemented for those staff and venues not adhering to the law.
- Training in identifying drunkenness and refusing service of alcohol to drunks should be maintained as a key feature of bar staff training for all venues in Liverpool's nightlife, including those not typically associated with alcohol-related harm.
- Consideration should be given to the most feasible way of training all bar staff in Liverpool's nightlife given their sheer number and frequent turnover (e.g. development and use of an electronic training package that could be delivered to new bar staff as part of their induction [and repeated at suitable intervals], with staff participation monitored by venue managers and, on occasion, statutory partners).
- Future intervention materials and promotion should focus on the posters, displayed in public settings outside and within the night-time environment, as well as radio adverts.
- Further evaluation on Drink Less Enjoy More could involve identifying the cost-benefit and social value of the intervention, including exploring the short and long term impact of the intervention on alcohol-related harms (e.g. A&E attendances, police-recorded crimes).
- Work to prevent drunkenness and sales of alcohol to drunks should be undertaken as part of a broader strategic approach that recognises the wider influences on alcohol use. This should include consideration of policy options around permitted alcohol service hours and minimum unit pricing that are likely to influence both overall alcohol consumption and in particular harmful drinking behaviours such as preloading.



## 1. Introduction

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UK nightlife environments have for many years been characterised by high levels of intoxication (Bellis and Hughes, 2011). Studies of nightlife users across England and Wales show that many expect to get drunk on a night out, expect other nightlife users to be drunk, and find getting drunk in nightlife settings to be socially acceptable (Quigg et al., 2015a; Quigg et al., 2015b). Further, many nightlife users drink at home before going on a night out, meaning they arrive in nightlife environments having already consumed a substantial amount of alcohol (Anderson et al., 2007). Excessive alcohol use damages the public's health, while managing nightlife drunkenness and associated problems such as anti-social behaviour and violence places huge demands on police, local authorities and health services (Anderson et al., 2007; Drummond et al., 2005). To reduce the harms associated with drunkenness in nightlife settings an extensive range of policies and interventions have been implemented at local and national levels including high profile policing, changes to licensing laws and environmental measures to improve safety (e.g. late night transport security, street lighting and closed circuit television camera networks [Bellis and Hughes, 2011; HM Government, 2012]). Whilst there is some evidence to indicate that such measures can contain and manage alcohol-related harms, they do little to reduce levels of intoxication or address harmful and pervasive cultures of nightlife drunkenness (Bellis and Hughes, 2011; Quigg et al., 2015a; Quigg et al., 2015b).

The high levels of drunkenness seen in town and city centres across the country belie the fact that it is illegal in the UK to sell alcohol to a drunk person, or to purchase alcohol for someone who is drunk<sup>2</sup>. Across England and Wales, between 2009 and 2013 only 29 individuals were prosecuted for selling alcohol to a drunk person and only four individuals were prosecuted for purchasing alcohol for a drunk person (HC Deb, 2014). Both public awareness of the laws and bar server compliance with it appears low (Hughes and Anderson, 2008). In 2013, the first UK study examining the propensity of bar servers to serve alcohol to drunks was undertaken in Liverpool City Centre's nightlife environment. The study involved actors attempting to purchase alcohol in nightlife venues while portraying a state of extreme intoxication. In 84% of purchase attempts the actors were sold alcohol, despite bar servers often clearly recognising them as being intoxicated (Hughes et al., 2014). Factors such as difficulties by both bar staff and authorities in defining and identifying drunkenness, and difficulties for authorities in identifying offences, are thought to contribute to both the over service of alcohol to drunks, and the low detection and prosecution rate for this offence (Nicholls and Morris, 2014; Stockwell et al., 1997).

Following presentation of the results and recommendations from the Liverpool pseudo-intoxicated actors study (Hughes et al., 2014) to multi-agency partners in the city, in 2014

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<sup>2</sup> Regulated under Section 141 and 142 of the Licensing Act 2003.

Liverpool City Council Public Health and Alcohol and Tobacco Unit (ATU) teams, Merseyside Police designed and implemented the Say No To Drunks pilot intervention<sup>3</sup>. Say No To Drunks built on international evidence showing that reductions in the service of alcohol to drunks, and associated harms, may be achieved through the implementation of multi-agency interventions that incorporate community mobilisation, enforcement of the law and responsible bar server training (Andreasson et al., 2000; Lenk et al., 2006; Wallin et al., 2005; Warpenius et al., 2010). Many of the features of these multi-component interventions are already in use in the UK, including multi-agency partnership working and targeted licensing enforcement, yet the focus on drunkenness and bar server compliance with laws on sales of alcohol to drunks has been lacking. The five week Say No To Drunks intervention aimed to: increase awareness of legislation preventing sales of alcohol to drunks; support bar staff compliance with the law; provide a strong deterrence to selling alcohol to drunks; and promote responsible drinking amongst nightlife users. Following an independent evaluation of Say No To Drunks and subsequent recommendations (Quigg et al., 2015a), the intervention was further refined and implemented as a second phase in 2015. Rebranded Drink Less Enjoy More, phase two comprised and enhanced key elements from the pilot stage including: a social marketing and public awareness raising campaign; bar staff training; and police enforcement. Further, phase two aimed to cover a wider geographical area compared to the pilot (i.e. all of Liverpool City Centre's nightlife area, rather than one section) and also target nightlife users prior to entering the night-time economy (NTE; Appendix 1). The Centre for Public Health at Liverpool John Moores University was commissioned to evaluate the intervention and compare the results to previous work (Hughes et al., 2014; Quigg et al., 2015a; Appendix 2).

The study aimed to:

- Explore nightlife user patterns of alcohol consumption and their use of the NTE;
- Identify knowledge of legislation on the service of alcohol to, and purchasing of alcohol for, drunks amongst nightlife users and bar staff;
- Assess the visibility and comprehensibility of the intervention amongst nightlife users and bar staff; and,
- Explore the impact of the intervention on: awareness of the law; expectations and tolerance of drunkenness in Liverpool's nightlife; drinking behaviours; and levels of alcohol service to pseudo-drunk actors.

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<sup>3</sup> With support from the CitySafe Partnership.

## 2. Methods

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To fulfil the objectives of the study, multiple research methods were used.

### 2.1 Nightlife user surveys

A short anonymous pre and post-intervention survey was undertaken with patrons using the Rope Walks nightlife area<sup>4</sup> on Friday and Saturday nights (pre-intervention survey: 17<sup>th</sup> and 18<sup>th</sup> October 2014; post-intervention survey: 27<sup>th</sup> and 28<sup>th</sup> November 2015). The pre-intervention survey aimed to explore: personal drinking behaviours including preloading; nightlife behaviours, including time entering the nightlife environment, areas visited and expected to visit, and expected home time; expectations and tolerance of drunkenness in Liverpool's nightlife; and knowledge of legislation on service of alcohol to drunks (see Quigg et al, 2015a). To explore the impact of the intervention, the post-intervention survey asked the same questions as the pre-intervention survey, as well as exploring participant awareness and perceptions of the intervention, and potential behavioural change as a result of the intervention. Surveys were designed to be completed by researchers on behalf of participants in face-to-face interviews.

Working in teams of at least three, trained researchers conducted surveys with nightlife users between the hours of 9.00pm and 4.35am. Surveys were conducted opportunistically, with participants recruited on the street. Prior to approaching potential participants, researchers visually assessed their level of intoxication based on criteria used by the police and in previous research (e.g. unsteadiness [Bellis et al., 2010; Perham et al., 2007]). Individuals who appeared highly intoxicated were not approached due to ethical issues concerning their ability to provide informed consent, and researcher and participant safety. Researchers approached eligible participants<sup>5</sup> and introduced themselves as being part of a research team from LJMU, provided a brief description of the research and survey, and asked them if they would like to take part. Of 758 individuals approached, 327 refused to participate (49.4% of those approached pre-intervention and 34.3% post-intervention). All remaining participants were provided with an information sheet which provided further study information including an explanation of the purpose of the study, what it would involve and assuring them of confidentiality. The information sheet was also summarised verbally by researchers to ensure participants fully understood what the study entailed and what they were consenting to. No individuals declined to participate once the study had been fully explained to them. Two hundred and twenty two individuals took part in the pre-intervention survey and 209 in the

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<sup>4</sup> The Liverpool Ropewalks nightlife area was the original intervention area (Quigg et al., 2015a) and thus the area used for data collection in the pre-intervention survey. Whilst the second phase of the intervention covered the whole of Liverpool City Centre, post-intervention surveys were conducted in the Ropewalks area only to provide a level of comparability between samples.

<sup>5</sup> To be eligible to participate, individuals had to be aged 18 or over and on a night out in Liverpool City Centre.

post-intervention survey. Throughout the explanation of the study and survey completion, researchers continued to monitor and assess participant intoxication levels. Thirteen individuals who had started the survey were later deemed too intoxicated to participate, or showed signs that they did not wish to continue. In these circumstances, researchers had been instructed to end the survey at a convenient point and thank the participant for their time. Thus, 214 pre and 202 post-intervention surveys were used in the final analyses.

## 2.2 Alcohol test purchase attempts

On five nights (Wednesday to Sunday, between the hours of 8pm to 4am) in November 2015, pseudo-intoxicated actor alcohol test purchases were carried out in 103 randomly selected licensed premises (pubs, bars and nightclubs) in Liverpool City Centre<sup>6</sup>. These followed the same protocol as pre-intervention test-purchases undertaken by the research team in May 2013 (see Hughes et al., 2014). Three of the post-intervention test purchases were removed from the analysis at the researcher's discretion due to queries over the displayed pseudo-intoxicated act, leaving a sample of 100 test purchases.

## 2.3 Bar staff surveys

In November 2015, licensed premises (bars, pubs and nightclubs) in Liverpool City Centre who had received the intervention materials and, or training were contacted (via Liverpool City Council ATU) and asked if they would permit researchers to approach bar staff during working hours to invite them to complete a survey with a researcher. All bar managers/owners agreed. Thus during the hours of 8pm to midnight on 27<sup>th</sup>/28<sup>th</sup> November and on weekdays/evenings between November and January, site visits were made by a researcher to share information about the study. Bar managers/owners were provided with an information sheet explaining the purpose of the study, what it would involve and assuring them of confidentiality. The information sheet was also summarised by a researcher to ensure individuals fully understood what the study entailed and what they were consenting to. Written consent was requested from bar managers/owners if they wished their premises to take part. No bar manager/owner declined to participate once the study had been fully explained to them.

Surveys with bar staff were conducted opportunistically at participating venues. A researcher introduced themselves to bar staff as being part of the research team at LJMU, and provided a brief description of the research and survey, and asked them if they would like to take part. Bar staff were provided with an information sheet and asked to provide verbal consent if they wished to take part in the survey. No bar staff declined to participate once the study had been fully explained to them. All bar staff working at the venue were eligible to participate in the survey, yet due to the practicalities of implementing the surveys during busy working hours researchers aimed to survey at least one bar server from each venue. Where appropriate,

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<sup>6</sup> Out of a total of 222 eligible venues.

information sheets and copies of the surveys were left with venues for staff to complete at their convenience and collected by a researcher later that night or the following day/week.

The survey was designed to be completed anonymously by bar staff and used open and closed questions that aimed to examine: bar server practice; awareness of legislation around the service and purchasing of alcohol for someone who is already drunk; awareness, perceptions and experiences of the intervention; and details of any training/support that they had received in relation to the service of alcohol to drunks. In total, 207 bar staff across 38 licensed premises completed the surveys.

## **2.4 Data analyses**

All data were entered, cleaned and analysed in SPSS v21. Analyses used descriptive statistics, chi-squared, t-tests, Mann-Whitney U and Kruskal-Wallis tests. To calculate the amount of alcohol consumed by nightlife patrons, drinks were coded into standard UK units using the following conversion: small glass of wine, 1.5 units; standard glass of wine, 2.1 units; large 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; a single (25ml) shot of spirits, 1.0 unit; and a pitcher of cocktail, 6.0 units<sup>7</sup>.

## **2.5 Ethics**

Ethical approval for the study was granted by Liverpool John Moores University Research Ethics Committee.

## **2.6 Study limitations**

There are a number of limitations that should be considered when interpreting the findings from this evaluation and if conducting similar research. Over four in ten (43%) of all nightlife users approached to participate in the pre and post-intervention survey refused. During the post-intervention survey weekend participant recruitment was adversely affected by wet weather conditions. Further, this weekend coincided with televised boxing matches which drew people into nightlife venues airing the event earlier on in the evening. Both of these factors may have altered use of the NTE and nightlife user alcohol consumption patterns. Finally, our study relied on self-reported estimates of alcohol consumption which were not verified.

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<sup>7</sup> See: <http://www.nhs.uk/Livewell/alcohol/Pages/alcohol-units.aspx>.

### 3. Findings

#### 3.1 Nightlife user survey: comparison of pre and post-intervention surveys<sup>8</sup>

##### Sample characteristics

There were no significant differences in sample characteristics between pre and post-intervention survey participants (Table 1). Compared to the pre-intervention survey, significantly more post-intervention survey participants stated that they expected to go home before 3.59am (pre, 64.4%; post, 74.8%;  $p < 0.001$ ). However, this difference may be explained by differences in the two weekends of survey. During the post-intervention survey weekend a televised boxing event was aired (in many nightlife venues) early evening, drawing nightlife users into the city centre earlier than usual. Further, this weekend had heavy rainfall past midnight. Despite these differences, during both weekends, overall survey participants expected to be in the city on a night out for around six hours.

**Table 1: Sample characteristics, pre and post-intervention survey**

Characteristic		Pre <sup>a</sup>	Post <sup>b</sup>	<i>p</i>
(n)		214	202	
Age group	18-21 years	40.8%	36.3%	NS
	22-29 years	39.9%	39.3%	
	30+ years	19.2%	24.4%	
Male		50.0%	54.5%	NS
Student		32.9%	30.7%	NS
Liverpool resident		49.3%	50.2%	NS
Regular nightlife user <sup>c</sup>		57.0%	53.0%	NS

*Note. NS = not significant. <sup>a</sup> October 2014 <sup>b</sup> November 2015 <sup>c</sup> Usually go on a night out in the city centre at least once a month.*

##### Alcohol consumption

In the pre and post-intervention survey, over 90% of participants reported that they had consumed alcohol prior to survey participation (referred to here as drinkers). There were no significant differences in the proportion of pre and post-intervention survey drinkers who reported preloading on the night of survey (e.g. drinking at home prior to their night out: pre, 65.4%; post, 58.9%;  $p = 0.227$ ). However, among those that reported preloading, the median number of alcohol units consumed when preloading reduced from 6.0 in the pre-intervention survey to 5.0 in the post-intervention survey ( $p < 0.05$ ). There was no significant difference in the proportion of pre and post-intervention survey drinkers who reported en route loading

<sup>8</sup> Full findings from the post-intervention survey can be found in Appendix 3.

(pre, 20.0%; post, 21.6%:  $p=0.788$ ), or the median number of alcohol units consumed during en route loading (pre, 4.0; post, 5.1:  $p=0.532$ ).

Compared with pre-intervention survey drinkers, a higher proportion of post-intervention survey drinkers reported having consumed alcohol that was purchased in pubs, bars or nightclubs (pre, 84.9%; post, 94.6%:  $p<0.01$ )<sup>9</sup>; there was no significant difference in the median number of alcohol units consumed in pubs, bars or nightclubs (pre, 6.0; post, 6.0:  $p=0.716$ ) (at the point of survey). There was no significant difference in the proportion of pre and post-intervention survey drinkers who reported having consumed alcohol from an off licence or supermarket (pre, 3.4%; post, 3.2%:  $p=1.0$ ) (at the point of survey), or the median number of alcohol units consumed from an off licence or supermarket (at the point of survey) (pre, 8.0; post, 6.5:  $p=0.315$ ). The total median expected alcohol consumption over the course of the full night out had significantly increased between pre and post-intervention survey drinkers (pre, 15.7; post, 20.0:  $p<0.01$ )<sup>9</sup>.

**Table 2: Alcohol consumption over the course of the night out, pre and post-intervention survey**

Alcohol consumption		Pre	Post	<i>p</i>	
Preloading <sup>a</sup>	%	65.4	58.9	NS	
	Units	6.0	5.0	<0.05	
En route loading <sup>a</sup>	%	20.0	21.6	NS	
	Units	4.0	5.1	NS	
City centre nightlife-purchased bars/pubs/nightclubs <sup>a</sup>	%	84.9	94.6	<0.01	
	Units	6.0	6.2	NS	
City centre nightlife-purchased from off-licences/supermarkets <sup>a</sup>	%	3.4	3.2	NS	
	Units	8.0	6.5	NS	
Total units consumed prior to survey completion <sup>a</sup>		Units	10.0	11.0	NS
Expected units consumed post survey <sup>b</sup>		Units	6.8	8.0	NS
Total units consumed during the night out <sup>c</sup>		Units	15.7	20.0	<0.01

*Note. Units presented are median value. NS = not significant. <sup>a</sup> Of those who had consumed alcohol pre survey only. <sup>b</sup> Of those who reported that they would drink alcohol post survey only. <sup>c</sup> Including reported and, or expected consumption.*

## Drunkenness

Using a scale of one (completely sober) to 10 (very drunk), participants were asked: how drunk they felt at the time of survey; how drunk they thought they would be when they leave the city's nightlife that night; what their ideal level of drunkenness is where they are as happy as

<sup>9</sup> As noted above, the post-intervention survey weekend coincided with televised boxing matches which drew people into nightlife venues airing the event earlier on in the evening. Further, this weekend had heavy rainfall. Both of these factors may have altered nightlife user use of the NTE and alcohol consumption patterns.



they can be; and what they thought the typical level of drunkenness was that people reach on a night out in Liverpool City Centre. There was no significant difference in the mean ideal level of drunkenness<sup>10</sup> reported by all participants between pre and post-intervention surveys (pre, 6.2; post, 6.3:  $p=0.438$ ), the reported level of drunkenness (at the time of survey) of drinkers (pre, 4.1; post, 4.1:  $p=0.841$ ), or the reported level of drunkenness that drinkers (including those who intended to drink post-survey) expected to be when leaving the NTE (pre, 6.6; post 6.9:  $p=0.150$ ). The perceived level of drunkenness that people reach on a night out in the city centre was significantly lower in the post-intervention survey compared to the pre (pre, 8.6; post, 8.2:  $p<0.05$ ).

Participants were asked how much they agreed or disagreed with a range of statements relating to drunkenness in Liverpool City Centre using a five point scale from strongly agree to strongly disagree<sup>11</sup> (Figure 1). The proportion of participants who agreed with the statement 'bar staff in the city centre don't care if people get drunk on their premises' was significantly reduced post-intervention (pre, 63.0%; post, 50.7%:  $p<0.05$ ; Figure 1). Further, a significantly smaller proportion agreed with the statement 'it's hard to enjoy a night out in the city centre if you don't get drunk' (pre, 34.9%; post, 22.5%:  $p<0.01$ ). There were no significant changes in levels of agreement with other statements.

### **Service of alcohol to drunk people**

There was no significant difference between pre and post-intervention surveys in the proportion of participants that agreed that: if someone was drunk and tried to get served alcohol on a night out in Liverpool they would usually be served (pre, 66.7%; post, 68.8%;  $p=0.715$ ); or in the city centre it's easy for people who are drunk to buy more alcohol in pubs, bars and nightclubs (pre, 73.0%; post, 72.1%:  $p=0.851$ ). Further, there was no significant difference in responses to the question 'would you be more or less likely to go to a bar if you knew it would not serve alcohol to someone who was drunk' (e.g. neither more nor less likely: pre, 50.2%; post, 55.7%:  $p=0.105$ ).

### **Perceptions of the law around serving alcohol to, and purchasing alcohol for, drunks**

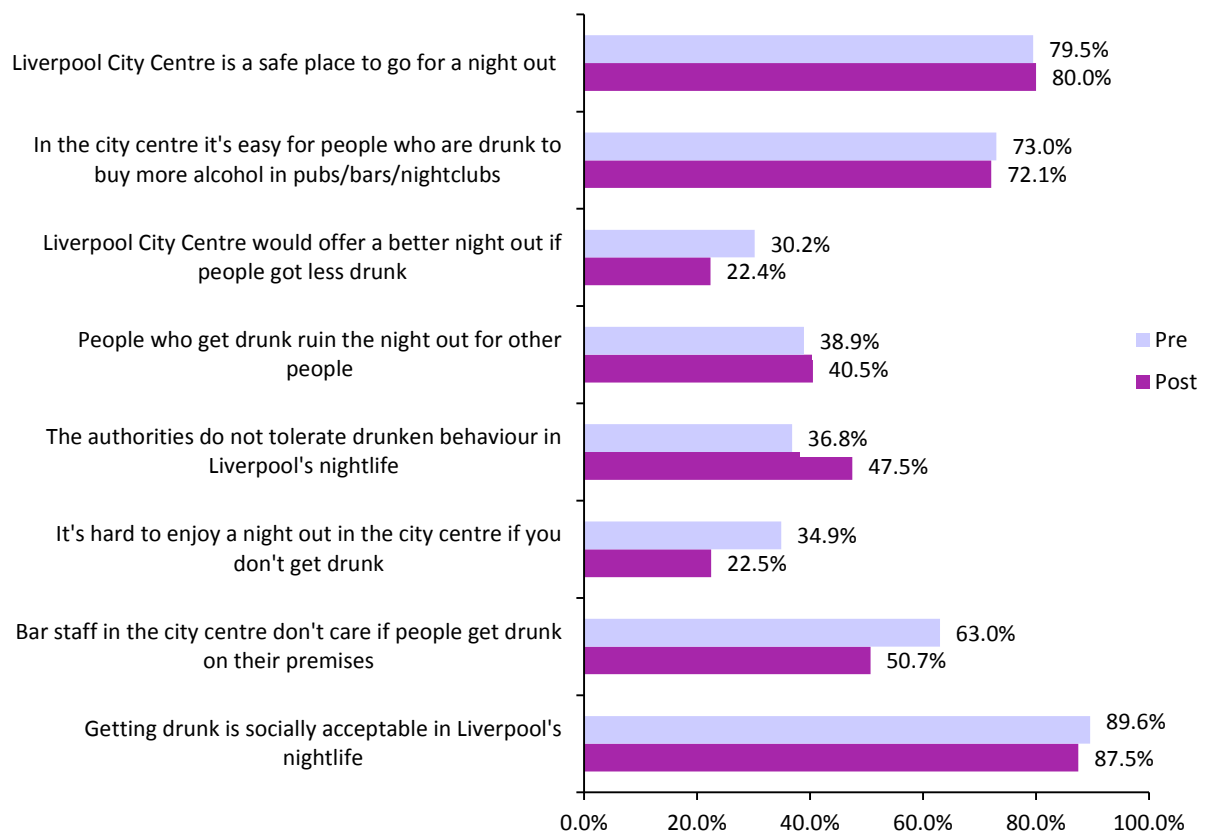
There was a significant increase in the proportion of participants recognising that it is illegal for a bar server to sell alcohol to someone who was already drunk between pre (45.1%) and post-intervention (65.5%) surveys ( $p<0.001$ ). The proportion of participants reporting that it is illegal for a person to buy alcohol for a friend who is already drunk also significantly increased from 32.9% to 55.0% ( $p<0.001$ ) (Figure 2).

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<sup>10</sup> When they are as happy as they can be after drinking alcohol.

<sup>11</sup> Strongly agree, agree, neither, disagree and strongly disagree.

**Figure 1: Proportion of participants strongly agreeing/agreeing with selected statements on drunkenness, pre and post-intervention survey**



**Figure 2: Participant perceptions of the law around serving alcohol to, and purchasing alcohol for, drunk people, pre and post-intervention survey**



### 3.2 Post-intervention nightlife user survey: intervention awareness

Survey participants were asked if they were aware of an intervention that had been running in Liverpool over the last ten weeks<sup>12</sup> called Drink Less Enjoy More; 24% (n=48) reported that they were aware of the intervention. Respondents were then informed about the intervention, showed an intervention poster and were asked to confirm whether or not they had heard of the intervention and or seen the posters. At this stage an additional 29 respondents said they were aware of the intervention. Overall, 38% (n=77) of post-intervention survey participants reported some awareness of the intervention. Of all individuals who were aware, 50.0% (n=37) reported having seen the intervention posters (20.3% in a bus stop, 4.1% in a venue, 25.7% elsewhere). Nearly a quarter (23.4%) reported knowing about the intervention due to having heard about it on the radio and 16.9% via social media (i.e. Facebook or Twitter); 2.6% had read about it in a newspaper or magazine article; whilst 14.3% had heard about the intervention through other means (e.g. on a billboard, or at university). No respondents reported having seen the Drink Less Enjoy More bar staff t-shirts, badges or bar runners.

All post-intervention survey participants were asked how much they agreed or disagreed with a range of statements about the intervention (Figure 3). Six in ten (61.7%) of all post-intervention survey participants agreed (strongly agreed/agreed) that the example posters demonstrated that people who are drunk in venues will not get served more alcohol; a quarter (27.5%) disagreed (strongly disagreed/disagreed), whilst 10.7% selected neither agree/disagree. Half (50.0%) agreed that the intervention makes them feel safer whilst on a night out in Liverpool City Centre. A third (32.0%) agreed that the intervention would make them more likely to come on a night out in Liverpool City Centre. A quarter agreed that the intervention would make them drink less alcohol before a night out in Liverpool City Centre (26.4%) or whilst in bars on a night out in Liverpool City Centre (28.5%).

Finally, participants were asked if in the past 10 weeks (i.e. the period since phase two of the intervention commenced) if they or anyone they knew had been served alcohol in a pub, bar or nightclub whilst drunk in Liverpool City Centre. Nearly six in ten (59.9%) respondents said they had, 32.0% said they had not and 8.1% said that they did not know.

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<sup>12</sup> Prior to the survey being implemented.

**Figure 3: Participants' perceptions of the Drink Less Enjoy More intervention, post-intervention survey**



### 3.4 Alcohol test purchase attempts

In November 2015, 100 alcohol test purchase attempts were made by pseudo-intoxicated actors across five nights (Wednesday, 21; Thursday, 28; Friday, 24; Saturday, 19; Sunday, eight) in randomly selected venues in Liverpool City Centre. Of these purchase attempts, just over a quarter (26%,  $n=26$ ) resulted in the sale of alcohol to a pseudo-intoxicated actor (compared to 84% of alcohol test purchases completed in May 2013; Hughes et al., 2014). Service rates varied significantly by week night; 38.1% of service attempts on Wednesday resulted in the sale of alcohol, 39.3% on Thursday, 8.3% on Friday, 26.3% on Saturday and 0.0% on Sunday ( $p<0.05$ ). There was no significant difference in the proportion of purchase attempts before and after midnight which resulted in a sale of alcohol (before, 23.5%; after, 31.3%;  $p=0.56$ ). There was no difference in service outcome by gender of the pseudo-intoxicated actor, however less male only actor pairs were served (6.7%) than female actor pairs (23.7%; mixed, 34.0%) but this was not significant ( $p=0.1$ ). In one fifth (22%) of test purchase's, the pseudo-intoxicated actor was asked to show ID at some point during the purchase attempt (ID at door, 20.0%; ID at bar 3.0%). There was no significant difference in service outcome by actors being asked for ID either upon entering the venue or by the server at the bar, or not being asked to show ID at all. In almost half (46.2%,  $n=12$ ) of all alcohol sales, actors notes indicated that the bar server attempted to up-sell by suggesting that they purchase a double measure instead of a single.

Ten established markers of poorly managed and problematic (PMP) bars were drawn from the observational data using an established tool by Graham et al. (2014) and used in previous research (Hughes et al., 2014). Across the 10 PMP markers, no single marker was individually associated with the sale of alcohol to pseudo-intoxicated actors. Of those venues with no PMP markers 25.0% resulted in a sale; this increased to 30.0% of purchase attempts in venues with 8-10 PMP markers. There was no significant association between the total number of PMP markers and the sale of alcohol to pseudo-intoxicated actors.

Where actors were refused service, the majority (95.9%) of attempts involved the server directly refusing the sale of alcohol (Box 1). Additionally, other tactics were also used to avoid the alcohol sale, these included offering a non-alcoholic drink (17.6%), using caring statements (12.2%), seeking the help of other staff (20.3%), ignoring the patron (i.e. passive refusal; 27.0%) and offering to call a taxi (1.4%). Only three bars were recorded (by researchers) as having material (e.g. posters) regarding the service of alcohol/drunkenness in the venue visible on display (i.e. at or around the bar) at the time of the service attempt. Of the 100 randomly selected test purchase venues, 31 had received the intervention materials and, or bar staff training. The pseudo-intoxicated actors were served alcohol in five of these premises.

### **Box 1: Example extracts from actors' notes on exchanges with bar servers**

#### **Test purchases resulting in alcohol service:**

- Bar tender asked me to re-say my drink twice, then asked me again half way through making it before serving me.
- Guy next to me told the server, "he is fucked". The server shrugged and continued to make drink. Server then tapped me to wake me up to give me drink.
- The server said "oh I shouldn't serve you", I went to leave, server then said "ah I know you're worse for wear but I'll give you one" and served me.
- The server rung it up on the till and said "£3.10", the server then observed me and asked me if I was alright, before continuing to serve me.
- The server told me I could only have a single and that if I got rowdy I wouldn't be served. Server then poured my drink. At the table, the server then came over and also gave me a glass of water as I was clearly drunk.
- A guy at the bar (not a bar server) said "don't serve her she's fucked", the bar tender served me anyway.

#### **Test purchases resulting in refusal of alcohol service:**

- Bar tender started to make drink then asked other bar server and they said no, other server said "sorry I can't serve you, you're too drunk".
- Other member of staff said to bar server "mate you can't serve her".
- I walked over to bar and one bar server told the other two not to serve me and then told me I was too drunk to be served.
- Two bar staff ignored me. I leant over to get attention and a third bartender said "I'm not serving you babe sorry".
- One bar server came over and said "move away from the bar, the only thing you're getting is water".
- At bar I stood waiting, the server saw me and went to talk to another bar server, the server then came to me and passed me a glass of water. I asked if I could have a vodka and was told "I can't serve you, you are too drunk".
- Spoke to one bar server who said "give me two mins" after talking to the supervisor, the supervisor came over and told me no I've had too much.
- I took my time approaching the bar and the bar server was observing me. They conferred with another member of staff before refusing me service before I even asked for a drink.

### 3.5 Bar staff surveys

#### Sample characteristics

Overall, 207 bar staff participated in the study of which 57.3% were male. Participant ages ranged from 18 to 55, with a mean age of 23 years. Bar staff had between one month and 23 years bar experience (average, two years six months). The majority (81.6%) of bar staff worked on a Friday and Saturday night (at least). The number of shifts worked in the past month ranged from two to 32, with a mean number of 16 shifts worked.

#### Alcohol service, drunkenness and the law

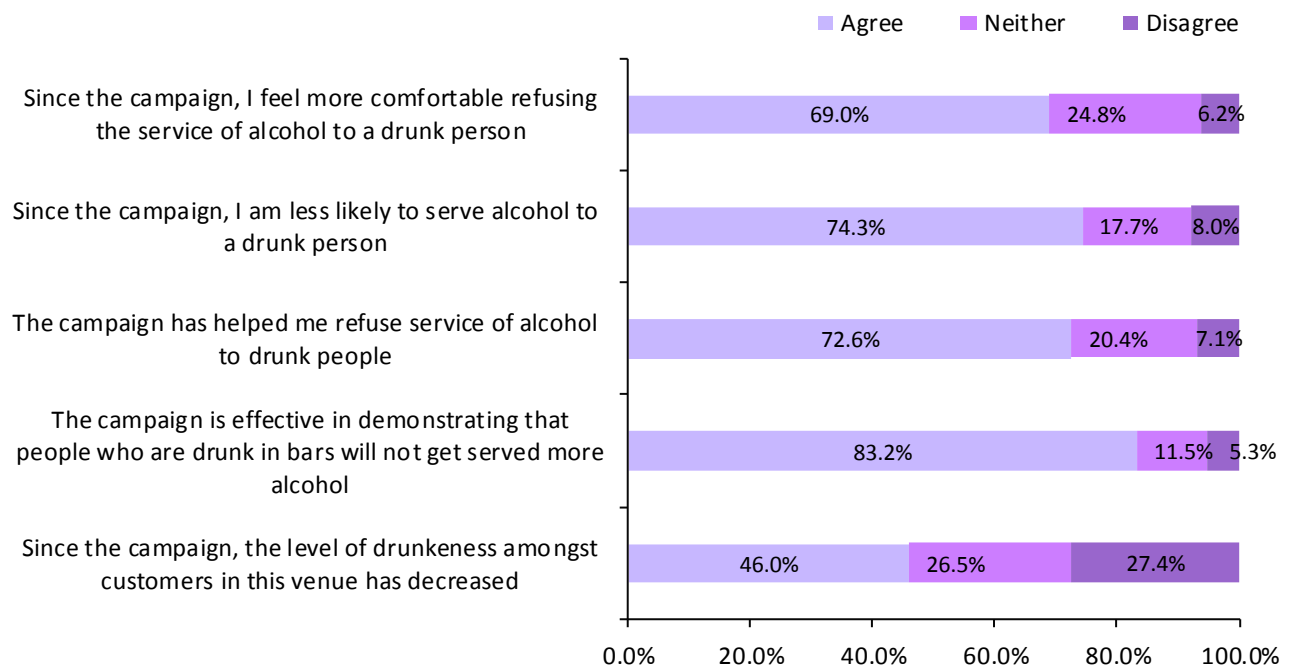
Participants were asked two questions relating to the service of alcohol to drunk customers. Eight out of ten (80.7%) participants stated they would never serve alcohol to a drunk person, whilst nearly a fifth (17.9%) reported they would some of the time and 1.4% most of the time. The majority of respondents reported feeling confident (confident or very confident) in refusing the service of alcohol to a drunk person (93.2%) and managing drunk customers within the bar (90.3%). Participants were also asked who they thought was responsible for preventing drunkenness and related problems within the bar (from a pre-selected list). The majority reported that door staff (91.7%), bar staff (88.3%) and managers (74.3%) were responsible, whilst 35.4% selected customers and 17.0% the police. Participants were asked whether they knew it was illegal to serve alcohol or buy alcohol for a drunk person. The majority of participants correctly reported that it is illegal for a bar server to sell alcohol to someone who is already drunk (95.1%) and for a person to buy alcohol for someone who is already drunk (86.2%).

#### The Drink Less Enjoy More intervention

Participants were asked whether they recalled seeing or hearing about the Drink Less Enjoy More intervention. Over half (54.9%) of respondents were aware of the intervention, of whom 67.9% had seen the posters and 53.6% the t-shirts, badges, postcards and bar runners. Over half (51.8%) knew about the intervention via social media, and a smaller proportion recalled hearing about it during a radio advert/discussion (18.8%) and seeing information about it in a newspaper article (13.4%). Almost seven in ten (69.0%) reported that since the intervention was implemented, they felt more comfortable in refusing the service of alcohol to a drunk person, with 74.3% also stating they were now less likely to serve alcohol to a person who is drunk (Figure 4). Moreover, 72.6% felt that the intervention had helped them refuse the service of alcohol to a drunk person, with 83.2% agreeing that the intervention was effective in demonstrating that alcohol will not be served to drunks. Nearly half (46.0%) agreed that the level of drunkenness had decreased in their bar since the launch of the intervention. The proportion of those reporting an awareness of the illegality of serving alcohol to a drunk person, or purchasing alcohol for a drunk person, was slightly higher among those who were aware of the intervention.



**Figure 4: Bar staff views on the impact of the Drink Less Enjoy More intervention**



### Alcohol server training

Participants were asked if they had received the Drink Less Enjoy More bar staff training programme delivered by Liverpool's ATU. Over a quarter (27.7%;  $n=57$ ) of participants reported that they had received the training, with half of these participants ( $n=26$ ) reporting completing the training within the last three months. A higher proportion (although not significant) of those who had received the training stated that: they would never serve a drunk customer (trained, 87.7%; not trained, 78.5%;  $p=0.247$ ); they felt confident (confident or very confident) in refusing service of alcohol to a person who is drunk (trained, 96.5%; not trained, 91.9%;  $p=0.479$ ); and they knew it was illegal to serve alcohol to a drunk person (trained, 98.2%; not trained, 93.9%;  $p=0.195$ ). Participants were also asked if they had received any other training around the service of alcohol to drunk people. Nearly two-thirds (64.9%;  $n=133$ ) said they had, with less than half ( $n=36$ ) of these participants reporting completing the training within the last three months. A significantly higher proportion of those who had received any training in the service of alcohol to drunks (including the Drink Less Enjoy More bar staff training programme) stated that: they felt confident (confident or very confident) in refusing service of alcohol to a person who is drunk (trained, 95.5%; not trained, 86.6%;  $p<0.05$ ).

Seven in ten (70.5%) of those aware of the Drink Less Enjoy More stated they had received training/advice/information from their managers/supervisors on the service of alcohol to drunks as part of the intervention (e.g. in team meetings, in-house staff training and online training).

## 4. Discussion and recommendations

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In 2013, a research study conducted in Liverpool City Centre documented a high level of alcohol service to pseudo-intoxicated actors in nightlife venues (84% of service attempts), suggesting that the law prohibiting the service of alcohol to drunks was routinely being broken (Hughes et al., 2014). Research from a number of countries has suggested that the implementation of multi-component interventions can lead to a reduction in the over service of alcohol to drunks, and subsequently alcohol-related harms (Jones et al., 2010; Trollidall et al., 2013; Wallin et al., 2005; Warpenius et al., 2010). In 2014 local partners piloted the Say No To Drunks intervention in one part of the city's nightlife area (Ropewalks; Quigg et al., 2015a). An evaluation of this pilot suggested some positive impacts, including an increase in nightlife user knowledge of legislation on the sale of alcohol to drunks and improved bar server confidence in refusing alcohol service to drunks (Quigg et al., 2015a). The evaluation provided a suite of recommendations to inform the future implementation and development of the intervention. Drawing on these recommendations and consultation with European (Norway) and UK (Wales; Quigg et al., 2015b) colleagues also engaged in tackling the sale of alcohol to drunks, local partners revised Say No To Drunks and implemented phase two of the intervention in 2015 (rebranded Drink Less Enjoy More).

Both Say No To Drunks (phase one) and Drink Less Enjoy More (phase two) incorporated key components that have been suggested as being vital to the success of reducing the service of alcohol to drunks and associated harms: community mobilisation, enforcement of licensing laws and responsible beverage server training (Jones et al., 2010). Compared to phase one, phase two had a more refined, ongoing and long-term focus<sup>13</sup>, covering the whole of the city centre nightlife area. Further, it aimed to target nightlife users and particular at-risk groups such as students, prior to them entering the NTE. Revised intervention materials were tested with the public prior to production. Partners ensured that key components of the intervention that did not come to full fruition in phase one were fully implemented in phase two (e.g. enhanced police enforcement activity). Partners aimed to inform all venues in the city centre about the intervention using a variety of methods (e.g. letter, visit), offering support to ensure they worked within the law, and free intervention materials and bar staff training. The intervention appeared to be well received by the licensing trade. During both phases the intervention was launched at a media event held in a local nightlife venue. In phase one, 23<sup>14</sup> venues within the intervention pilot area voluntarily took part and 860 bar staff from across the city accessed the training. In phase two, over 60 venues<sup>15</sup> requested intervention materials and over 20 venues (435 staff) accessed the bar staff training. Further, there was

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<sup>13</sup> The pilot phase ran over a five week period only.

<sup>14</sup> Out of around 35 venues.

<sup>15</sup> Out of around 222 venues.

evidence of licensed premises providing bar staff with additional support and training in refusing the service of alcohol to drunks, beyond that provided as part of the intervention.

The evaluation of phase one (Quigg et al., 2015a) and two (presented in this report) aimed to establish the intervention's impact on: awareness of the law; expectations and tolerance of extreme drunkenness in Liverpool's nightlife; drinking behaviours; and levels of alcohol service to pseudo-intoxicated actors. Findings demonstrate a range of positive impacts of the intervention. Although the pre (October 2014) and post-intervention (November 2015) nightlife user surveys involved different participants (although similar in characteristics) and thus no definitive conclusions can be drawn, a number of positive changes were observed:

- The proportion of participants who correctly reported that it is illegal for a bar server to sell alcohol to someone who is drunk increased significantly (from 45.1% to 65.5%);
- The proportion of participants who correctly reported that it is illegal to purchase alcohol for a drunk friend increased significantly (from 32.9% to 55.0%);
- The perceived level of drunkenness that people reach on a night out in the city centre decreased significantly (from 8.6 to 8.2);
- The proportion of participants agreeing that bar staff in the city centre do not care if people get drunk on their premises decreased significantly (from 63.0% to 50.7%); and,
- The proportion of participants agreeing that it's hard to enjoy a night out in the city centre if you do not get drunk decreased significantly (from 34.9% to 22.5%).

Crucially, the repeat of the 2013 pseudo-intoxicated actors study at the end of the evaluation period (November 2015) found substantially lower levels of alcohol service. In May 2013, 84% of alcohol test purchases resulted in the sale of alcohol compared with only 26% in November 2015. Bar staff knowledge of, and attitudes towards, the service of alcohol to drunks post intervention was also positive. The majority of those surveyed were aware of the laws around the service of alcohol to drunks; awareness was higher (although not significantly) amongst those who were aware of the intervention. Of those who were aware of the intervention, the majority agreed that since the intervention was implemented they felt more comfortable in refusing the service of alcohol to a drunk person, and were now less likely to serve alcohol to a person who is drunk. Finally, a significantly higher proportion of those who had received any training in the service of alcohol to drunks (including the Drink Less Enjoy More bar staff training programme) stated that: they felt confident in refusing service of alcohol to a person who is drunk, compared to those receiving no training.

Improved awareness of the law around the service of alcohol to drunks amongst bar staff and the public is a critical first step in ensuring compliance with the law. The study suggests that knowledge of the law increased amongst nightlife users after phase one, and even more so after phase two. This continued increase in nightlife user awareness of the laws could be the result of consistent messages regarding the illegality of service of alcohol to drunks two years running, and or changes in the intervention marketing strategy and materials. Changes to the

marketing strategy and materials appear to have had a positive effect. After phase two, 38% of nightlife users surveyed reported being aware of the intervention, compared with 17% of those surveyed after phase one. To engage nightlife users prior to entering Liverpool's nightlife, phase two included positioning intervention posters along public transport pathways as well as within licensed premises. Of those nightlife users who had seen the phase two intervention posters, a fifth had seen them in a bus stop, whilst only one in twenty had seen them within a licensed premise. Further, nearly a quarter had heard about the intervention via radio advertisements, also introduced in phase two. Finally, compared with phase one, a higher proportion of those surveyed after phase two agreed that the intervention materials demonstrated that people who are drunk in bars will not get served more alcohol (not significant), the intervention made them feel safer whilst on a night out in Liverpool City Centre (significant;  $p < 0.01$ ), and they were more likely to come on a night out as a result of the intervention (significant;  $p < 0.01$ ).

The study found a dramatic decrease in the service of alcohol to pseudo-intoxicated actors by bar staff in city centre venues. Such effects have been demonstrated in other European nightlife environments where similar interventions have been implemented (e.g. Brennan et al., 2011; Jones et al., 2010; Warpenius et al., 2010). Whilst our study did not have a control site<sup>16</sup> to which we could compare this change, the same researcher and actor team implemented a pseudo-intoxicated actor study (with identical methodology) in another large nightlife area (without an intervention) within two weeks of this post-intervention Liverpool study. The alcohol service rate in that nightlife area was similar to the service rate found in the 2013 Liverpool study (i.e. pre-intervention; Ford et al., in press). Further, an evaluation of a similar intervention in nightlife areas in South Wales has shown similar reductions in the service of alcohol to pseudo-intoxicated actors (from 82.3% to 57.3%; Quigg et al., 2016). This supports the notion that the decrease in service rate is a result of the intervention rather than other effects (e.g. economic recession), suggesting that such interventions may be effective in eliciting change, although further research would be needed to affirm this. Further, it is not known if or how sustainable this reduction would be if the intervention was not continued in the future. Continuing to monitor bar server practice through police enforcement activity or research methods such as using the pseudo-intoxicated actor methodology would help address this question, and inform the future implementation of the intervention.

The study found that service rates varied significantly by week night, although there was no clear distinction between weekday or weekend service rates. Further, there was no significant difference in the proportion of purchase attempts before and after midnight which resulted in a sale of alcohol. As with the previous pseudo-intoxicated actors study (Hughes et al., 2014), this study found no significant relationship between ten established markers of poorly and problematic bars (e.g. low seating, cheap drinks promotions; Graham et al., 2013; Hughes et

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<sup>16</sup> I.e. a comparable area that had no intervention implemented.

al., 2014) and service to pseudo-intoxicated actors. In fact, a number of successful test purchases were in venues not associated with alcohol-related harms, and or venues that had received the intervention materials/bar staff training.

Whilst research suggests that multi-component interventions such as Drink Less Enjoy More, rather than individual measures, can be effective in reducing the service of alcohol to drunks and associated harms, it would be useful to further explore the relative contributions of each element of Drink Less Enjoy More in changes in bar server practice, as well as the associated costs of implementing each element. For example, police activity around enforcing the law was a key component of phase two that was not fully implemented in phase one – without this element would the positive results shown still have occurred? A study in Finland has suggested that the most crucial element of such multi-component interventions is effective licensing control (Warpenius et al., 2010). Bar staff training appears to have a positive effect on bar staff knowledge of the law and responses to the service of alcohol to drunks. Given the high-turnover of bar staff, and also the number of bar staff working in the city centre, future consideration may need to be given to what the most feasible way to train all bar staff is given available resources. For example, as part of the South Wales Know the Score #DrinkLessEnjoyMore intervention, local partners have produced an electronic training package for bar staff on identifying drunk customers and refusing the service of alcohol to them (Quigg et al., 2016).

During both phases nightlife users who were aware of the intervention primarily knew about it due to posters or radio advertisements/discussions, few had seen materials such as bar staff t-shirts or badges - around half of venues requesting the intervention materials used them consistently throughout the intervention period. Further, despite the evidenced reduction in the service of alcohol to pseudo-intoxicated actors, knowledge of this change appears to be low amongst nightlife users. Our study found no significant difference in the proportion of nightlife users pre and post-intervention agreeing with statements that if someone was drunk and tried to get served alcohol on a night out in Liverpool they would usually be served, or that in the city centre it is easy for people who are drunk to buy more alcohol in pubs, bars and nightclubs. In addition to promoting and maintaining the intervention across the city centre, future work should consider highlighting the outcome of the test purchases and police enforcement activity. Firstly to demonstrate that partners are actively assessing compliance with the law, and also to commend the efforts of licensed venues that are adhering to the law and supporting the intervention outcomes.

The evaluation suggests that there may have been a decrease in the perceived level of nightlife user intoxication in Liverpool City Centre, as well as the proportion of nightlife users agreeing with the statement that it's hard to enjoy a night out in the city centre if you don't get drunk. However, findings do not currently support a wider impact on overall alcohol consumption or social tolerance of drunkenness in nightlife. The study found that reported

nightlife user alcohol consumption over the course of the night out was higher in the post-intervention survey (November 2015) compared with the pre-intervention survey (October 2014). However, this difference may be due to temporal factors. Thus, when comparing the post-intervention nightlife user survey to the survey implemented after phase one, which was conducted in the same month in the previous year (November 2014; see Appendix 2), there was no significant difference in nightlife user alcohol consumption over the course of the night out ( $p=0.106$ ). Both of these surveys were conducted on weekends that had major sporting events televised in local nightlife venues early on in the evening, which may have increased levels of alcohol consumption (Lloyd et al., 2011; Morleo et al., 2013).

Changing cultures of intoxication in nightlife environments is a complex task that will take time. In Stockholm, sustained reductions in the service of alcohol to drunks were seen over a seven-year period following on-going work by local partners to address server practice and increase awareness (Wallin et al., 2005). Cultures of intoxication in nightlife environments will be affected by broader alcohol policy, price and promotion. For instance, the discrepancy between on and off-licensed premise alcohol sales is a factor in the consumption of alcohol at home prior to a night out (known as preloading; undertaken by 58.9% of our post-intervention survey participants) (Wells et al., 2009; Mintel, 2003). With preloading associated with excessive alcohol consumption and violence in nightlife (Hughes et al., 2008; McClatchely et al., 2014; Santos et al., 2014), preventing preloading is likely to reduce alcohol-related problems in the NTE. However, the price of off-licensed purchased alcohol is only one of many factors that promotes preloading. Other factors include: a desire to get drunk, to reduce social anxieties and enhance the night out; group bonding before entering the NTE; occupying time before everyone is ready to start the night out; and a ritual habitual passage from the norms of everyday life to the social nightlife environment (Christmas and Seymour, 2014; Wells et al., 2009). One English study has suggested that preloading is in fact not a substitute for nightlife drinking, with similar amounts drunk by preloaders and non-preloaders whilst in nightlife settings (Hughes et al., 2008). Another study in England found that drunkenness amongst young people during nights out was a norm that is enforced, expected and valued by peers, motivated by a desire to escape from everyday life, bond with peers, and engage in social adventures and subsequent story telling (Christmas and Seymour, 2014). Addressing drunkenness in nightlife is complex and has to fit within a broader long term approach to tackling the societal harms from alcohol consumption, whilst also considering the social desires of the public.

## **Conclusion**

Previous studies have suggested that multi-component community based interventions can have a significant effect on reducing the over service of alcohol to drunk people and subsequent alcohol-related harms in nightlife settings. The Drink Less Enjoy More intervention implemented in Liverpool City Centre is one of the first of its kind in England, aiming to address the over service of alcohol to drunks following this evidenced based multi-

component approach. Findings from the intervention evaluation are extremely positive, suggesting that since Drink Less Enjoy More was implemented, nightlife user and bar staff knowledge of the laws around the service of alcohol to drunks has significantly increased, and crucially the service of alcohol to pseudo-intoxicated actors has reduced substantially. Learning from the pilot phase and subsequent amendments to the intervention, and a greater commitment to implementing all aspects of the intervention, has served to strengthen the intervention's impact. Although wider impacts on addressing the culture of drunkenness in Liverpool's nightlife were not observed, it is important that this intervention is recognised as a crucial step in a developing body of work to prevent sales of alcohol to drunks. Importantly, this work is helping create safer and healthier nightlife environments in Liverpool, and elsewhere across the UK.

### **Recommendations**

- Drink Less Enjoy More should form part of an on-going work programme to address drunkenness and associated harms in the city, driven by a multi-agency steering group.
- The intervention messages, activity and outcomes should be regularly communicated across local stakeholders, including those working in and using Liverpool's nightlife, particularly during peak times for alcohol-related harms in the city's nightlife. Communication could include:
  - Reassertion that venues in Liverpool's nightlife do not, and will not, serve alcohol to drunk customers (evidenced through the pseudo-intoxicated actor test purchase methodology);
  - Commendation to those premises supporting the intervention, adhering to the law and ultimately helping develop a healthy nightlife environment that aims to promote the public's health; and,
  - The positive outcomes of the intervention (e.g. from the evaluation and future intervention monitoring).
- Bar server propensity to serve alcohol to drunk people should be regularly monitored by police, and on occasion through the use of the pseudo-intoxicated actor methodology, with appropriate responses implemented for those staff and venues not adhering to the law.
- Training in identifying drunkenness and refusing service of alcohol to drunks should be maintained as a key feature of bar staff training for all venues in Liverpool's nightlife, including those not typically associated with alcohol-related harm.
- Consideration should be given to the most feasible way of training all bar staff in Liverpool's nightlife given their sheer number and frequent turnover (e.g. development and use of an electronic training package that could be delivered to new bar staff as part of their induction [and repeated at suitable intervals], with staff participation monitored by venue managers and, on occasion, statutory partners).



- Future intervention materials and promotion should focus on the posters, displayed in public settings outside and within the night-time environment, as well as radio adverts.
- Further evaluation on Drink Less Enjoy More could involve identifying the cost-benefit and social value of the intervention, including exploring the short and long term impact of the intervention on alcohol-related harms (e.g. A&E attendances, police-recorded crimes).
- Work to prevent drunkenness and sales of alcohol to drunks should be undertaken as part of a broader strategic approach that recognises the wider influences on alcohol use. This should include consideration of policy options around permitted alcohol service hours and minimum unit pricing that are likely to influence both overall alcohol consumption and in particular harmful drinking behaviours such as preloading.

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## 6. Appendices

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### Appendix 1: The Drink Less Enjoy More intervention

#### **Purpose**

The Drink Less Enjoy More intervention is the second phase of a work programme in Liverpool City Centre aiming to:

- Raise awareness that it is illegal to serve alcohol to, and purchase alcohol for drunks;
- Support bar staff compliance with the law regarding the sale of alcohol to drunks; and,
- Encourage people to drink responsibly.

#### **Intervention steering group and implementation coordinator**

The intervention was developed, implemented and managed by a project steering group with representatives from Liverpool City Council Public Health and ATU teams, Merseyside Police, We Are Brave26 (pilot stage only) and the Centre for Public Health, at Liverpool John Moores University. A member of the ATU team acted as the key contact for participating venues, coordinating the implementation of the intervention including: recruiting venues in collaboration with the police; implementing bar staff training; training door staff on the use of the breathalysers and evaluation data collection (pilot stage only); and visiting participating venues throughout the intervention period (of a weekend and weekday) to identify how the intervention was progressing, and identify and address any issues.

#### **Target audience**

The intervention was targeted towards nightlife users (particularly young people, students and visitors to the city), and bar and door staff (pilot phase only) working in Liverpool City Centre's nightlife<sup>17</sup>. Venues were offered free intervention materials, and bar staff training in preventing the service of alcohol to drunks and those underage. Prior to, and during the first few weeks of phase two of the intervention commencing, over 60 venues requested and received the intervention communication materials (see below) and over 20 requested the training for their bar staff.

#### **Key elements of the intervention**

In 2014, Liverpool City Council Public Health and ATU teams, Merseyside Police and CitySafe, designed and implemented the Say No To Drunks pilot intervention. Following an independent evaluation of Say No To Drunks and subsequent recommendations (Quigg et al., 2015a), the intervention was further refined and implemented again in 2015. Rebranded

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<sup>17</sup> The pilot stage focused on one part of the city centre's nightlife only - the Ropewalks area (an area including around 35 pubs, bars and nightclubs across a number of streets).

Drink Less Enjoy More, phase two comprised, and enhanced upon, key elements from the pilot stage including:

- A social marketing and public awareness raising campaign;
- The development of a range of communication materials branded with the Drink Less Enjoy More strapline including:
  - Posters for staff and the public (Figure A1)<sup>18</sup>;
  - Bar runners;
  - Briefing sheets for venue staff;
  - T-shirts and badges for venue staff; and,
  - Postcards for university halls of residence.
- Training for bar staff provided by the ATU team so that they can confidently refuse sales to drunks;
- Enhanced police enforcement activity including undercover police operations; and,
- A dedicated intervention webpage (Figure A2; [www.drinklessenjoymore.co.uk](http://www.drinklessenjoymore.co.uk)); Facebook page (Figure A3: <https://www.facebook.com/DrinkLessEnjoyMore/>) and Twitter account (Figure A4; [https://twitter.com/drinkless\\_enjoy](https://twitter.com/drinkless_enjoy)).

### Creative development

Prior to the development of the communication materials for phase two, six creative routes were tested by Liverpool City Council with a segment of the target audience. The chosen route used an iPhone message screen grab design to portray text conversations between peers before and during a night out. The messaging and choice of language used was aimed at being representative of Liverpool/student style communication. Examples of this language included terms such as “offy”, “bevviied” and “guttied” and played out scenarios of nights being ruined or potentially cut short by people being too drunk. There were four designs aimed at targeting people at different points of the customer journey from before they go out, to whilst they are out and also a message for bar staff.

- **Before buying alcohol for preloading (drinking at home before they go out):** the aim was to raise awareness of the laws and reduce the amount of alcohol bought for preloading through an advertising campaign with Juice FM, and social media advertising through Facebook and Twitter.
- **Point of purchase for alcohol for pre-loading:** Outdoor advertising (e.g. bus stops, bill boards) near places where alcohol is purchased for home drinking such as off-licenses and supermarkets (targeted to areas where students reside)
- **Travel into the city centre on a night out:** this targeted advertising aimed to reduce the amount of alcohol consumed whilst travelling to the city centre and whilst in the city centre. This included adverts at bus stops, billboards and on buses.
- **City centre:** in-venue promotion such as posters, staff t-shirts etc.

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<sup>18</sup> Displayed in local venues, universities, hotels and along transport routes in the city (e.g. bus stops and bill boards).

The imagery allowed for peer to peer influence about ensuring everyone had a good night by not getting too drunk rather than raising awareness of the health and social issues of drinking too much.

### **Website**

An intervention website was established providing information on: the law around, and consequences of, serving alcohol to drunks; the intervention; preloading and associated risks; things to do to reduce levels of drunkenness; street pastors and their role in supporting vulnerable nightlife users; and taxi ranks.

### **Drink Less Enjoy More bar staff training session**

The bar staff training session was delivered to 435 bar staff<sup>19</sup> working in over 20 licensed premises across the city centre in the months leading up to, and during, phase two of the period. Designed and delivered by staff from the ATU, the training session lasted for half an hour and covered: the law regarding the sale of alcohol to drunks and implications of serving drunk people for bar staff, the venue, customers, the NTE and local public services (e.g. health, police, council); signs commonly used to identify a drunk person; and methods to confidently refuse service to a drunk person.

### **Communications toolkit for partners**

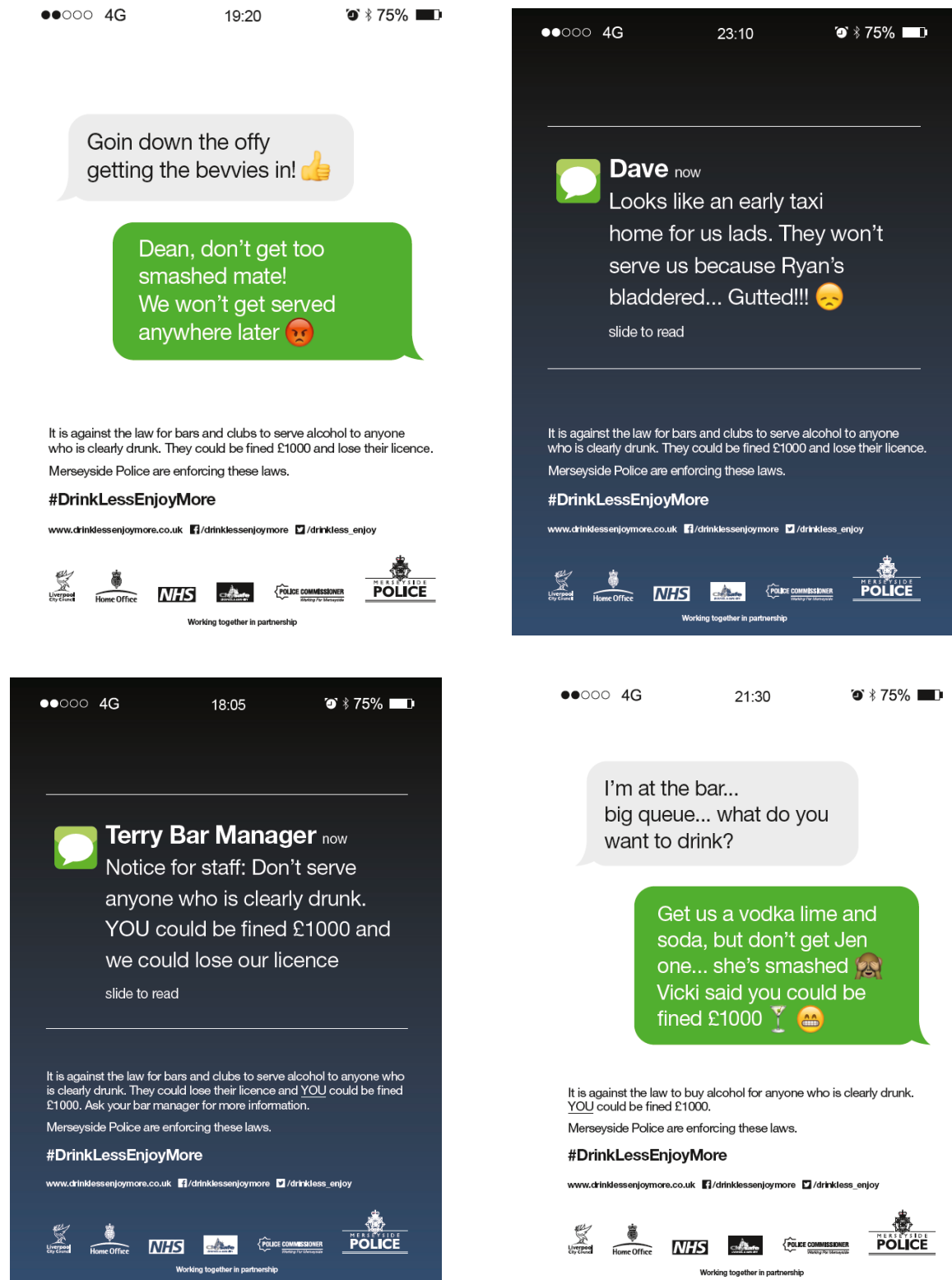
The communications toolkit was designed to raise awareness of the intervention amongst partners and to help them in turn raise awareness about the intervention to their audiences. The toolkit included: information about the intervention and planned activities; ways in which partners could support the intervention, examples of communication methods; and details on how to access intervention materials or obtain further information. The toolkit was sent out to a range of partners who have contact with the target audience including local universities, Merseyside Fire and Rescue Service, health@work, housing associations and Merseytravel.

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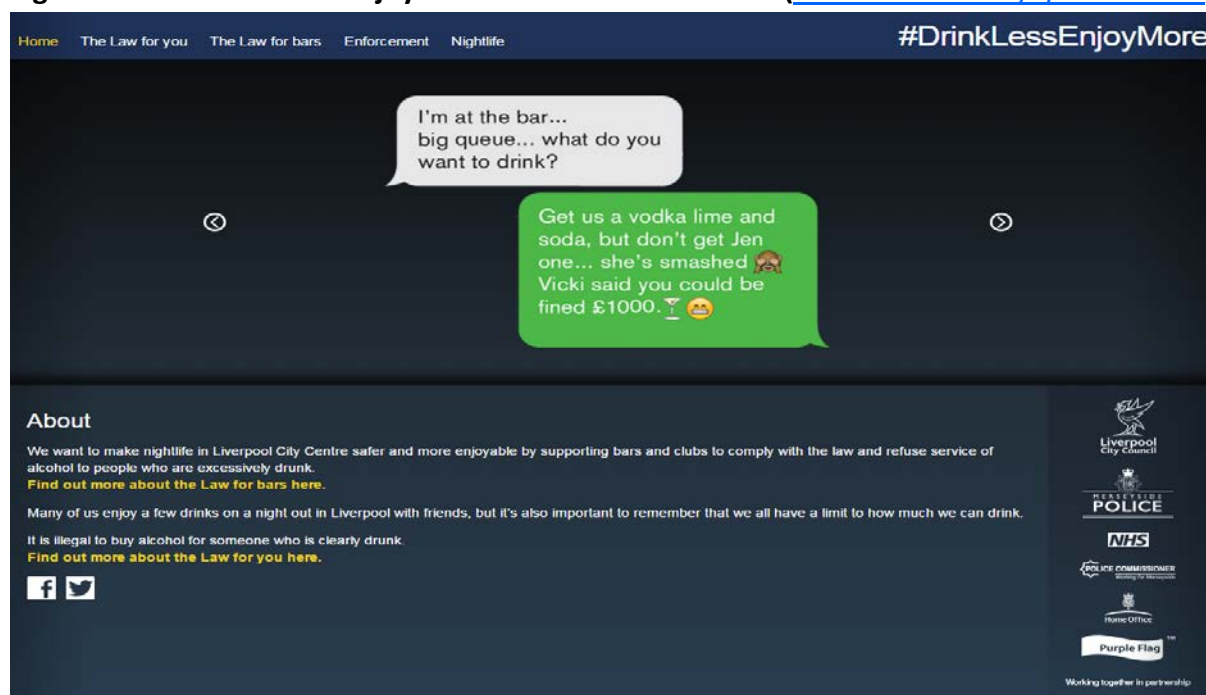
<sup>19</sup> 860 in the pilot stage (2014).



Figure A1: Drink Less Enjoy More intervention posters



**Figure A2: The Drink Less Enjoy More intervention website ([www.drinklessenjoymore.co.uk](http://www.drinklessenjoymore.co.uk))**



### **Press and social media activity**

The intervention was launched to the public on 1<sup>st</sup> October 2015. The launch took place in a popular bar within Liverpool City Centre, and a release was issued to the press with pictures of the communication materials in situ in the bar, and partners supporting the intervention including bar staff, Merseyside Police and the ATU. Further releases were issued and timed for maximum exposure over subsequent months. These were included after Merseyside Police had issued a warning to several bars who they had found to be breaking the law (i.e. serving to drunks) and also during the Christmas period. In addition, radio adverts were produced and aired on local stations (Juice FM) based on two of the four designs, providing a warning that Merseyside Police were actively enforcing the laws around the service of alcohol to drunks in Liverpool City Centre.

A range of social media was produced and promoted through mediums including Facebook and Twitter. This included: social media adverts reflecting the four creatives featured on people's Facebook newsfeeds and on the right side of their home pages; and regular posts about the law, with tips on how to have a good night and stay within the law. Posts were published primarily on the run up to weekends, around pay days and before big events such as football matches and Christmas nights out. Messages about the intervention were also posted/tweeted by partner organisations including Merseyside Police, local universities and licensed premises. The use of the hashtag #Drinklessenjoymore was encouraged. Google ad words were also used which meant that when people searched for key words such as 'nightlife in Liverpool', the Drink Less Enjoy More website would come up.

Figure A3: The Drink Less Enjoy More intervention Twitter account<sup>20</sup>

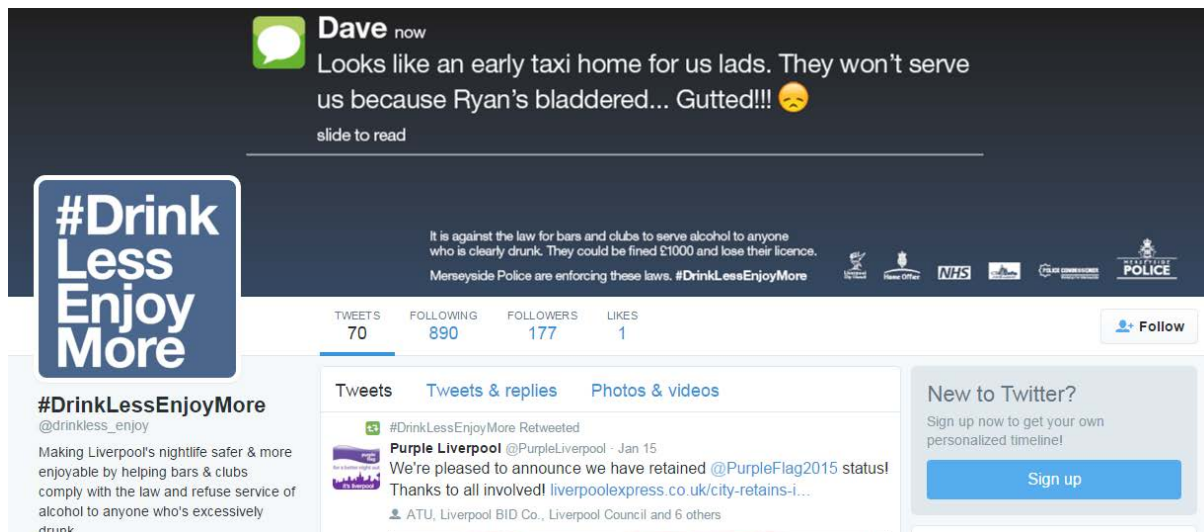
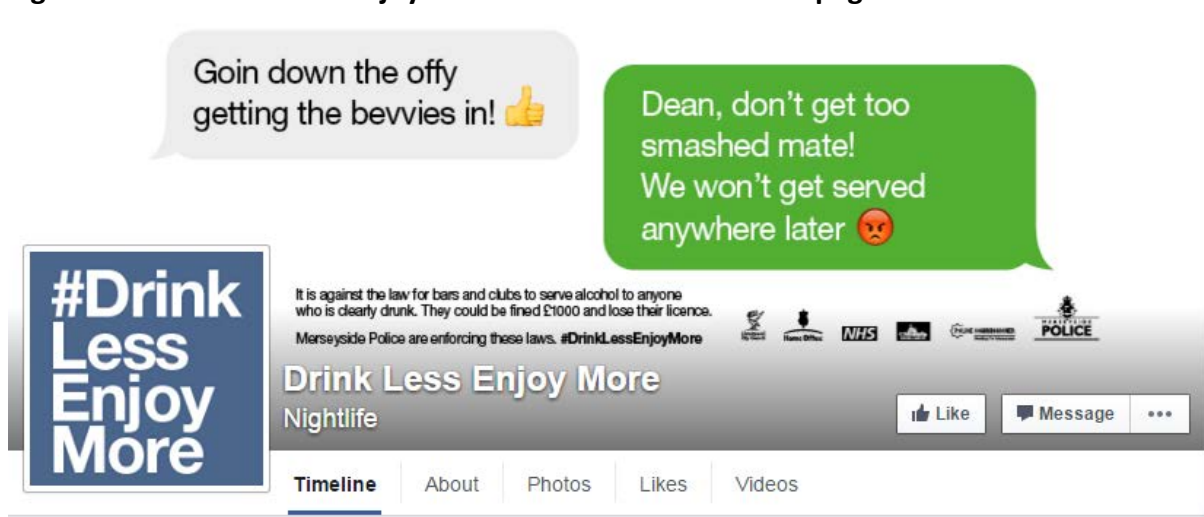
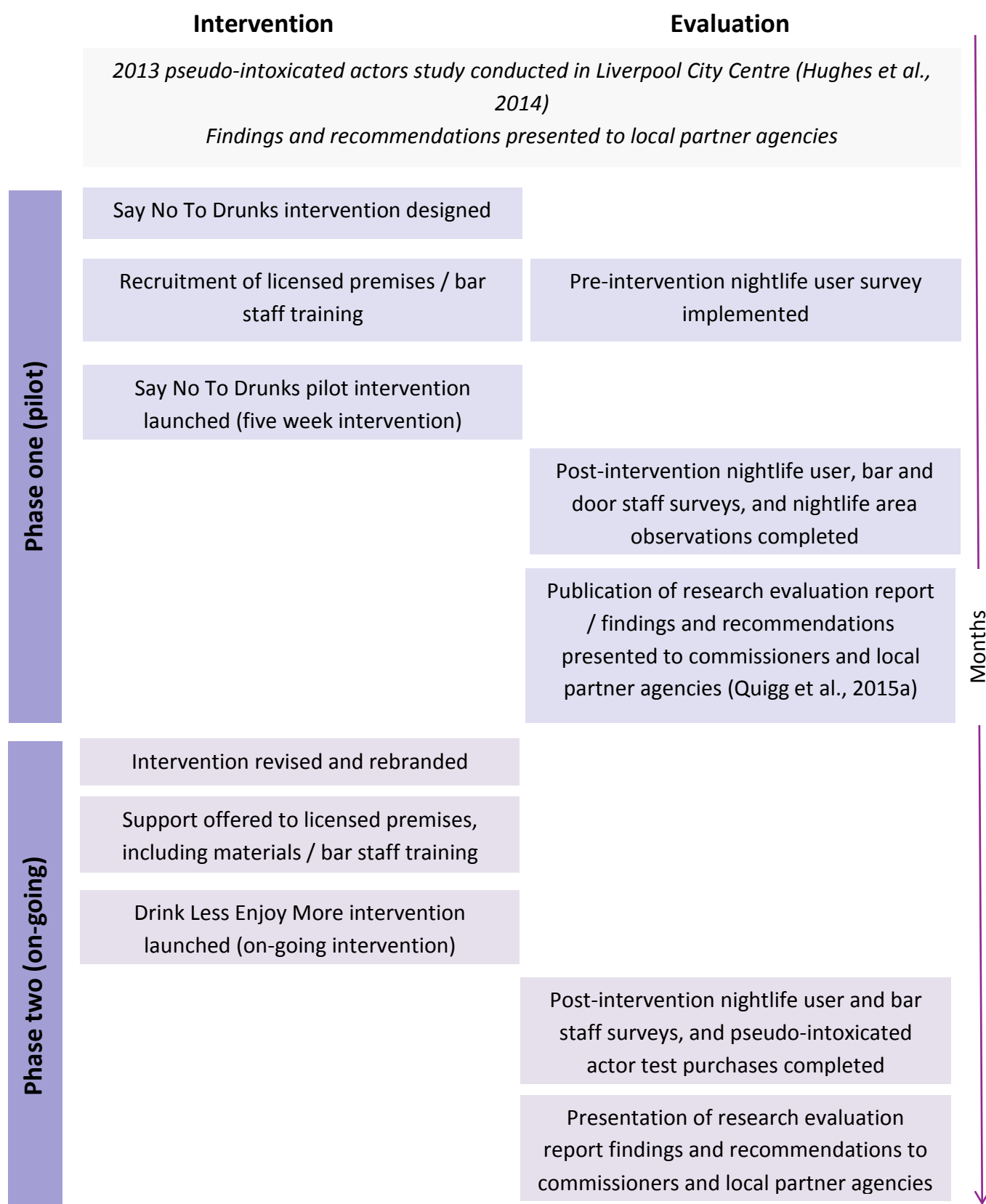


Figure A4: The Drink Less Enjoy More intervention Facebook page<sup>20</sup>



<sup>20</sup> Snapshot of account taken on 20/1/16.

## Appendix 2: Say No To Drunks/Drink Less Enjoy More intervention and evaluation



## Appendix 3: Post-intervention nightlife user survey findings

### Sample characteristics

Two hundred and two nightlife users completed the post-intervention survey. Just under half (44.5%) were conducted between the hours of 10pm and 11.59pm. Over half (54.5%) of participants were male and participants ranged in age from 18 to 60 years, with a mean age of 25 years. Half (50.2%) of participants were currently a Liverpool resident and just over three in ten (30.7%) were students.

### Nightlife usage

A fifth (21.8%) of nightlife users reported that they typically go on a night out in Liverpool City Centre once a week or more, with 12.4% reporting going on a night out 2-3 times per month and 48.5% once a month or less. Almost one fifth (17.3%) were on their first night out in the city. Two thirds (66.8%) of participants had arrived in Liverpool City Centre for their night out before 10pm. Three in ten (27.7%) reported coming into the city centre between 10pm and 11.59pm, while 5.4% reported entering past midnight. Two thirds (67.3%) of participants intended to leave the city's nightlife between the hours of 12am and 3.59am, whilst 25.1% expected to go home after 4am. On average, from the time of entry in the city centre's nightlife until anticipated home time, survey participants expected to spend six hours in Liverpool's nightlife. At the time of the survey, participants had visited on average two venues (range: zero to seven); 5.8% of participants had not visited any pubs, bars or nightclubs. Of those who had visited at least one venue, 75.4% had visited a venue(s) in one area of the city's nightlife, 21.2% had been to venues across two areas and 2.2% three areas. The majority (93.9%) had visited a venue in the Ropewalks area (where surveys were conducted), with smaller proportions reporting having visited venues in areas of Mathew/Victoria Street (10.1%), Albert Dock (4.5%), Hardman Street (7.3%), the Baltic Triangle (1.7%) and other nightlife areas in the city centre (10.1%). Over half (54.0%) of participants intended to visit a venue in the Ropewalks area post-survey, with less participants intending to visit other areas of Liverpool's nightlife (Mathew/Victoria Street, 6.9%; Albert Dock, 1.5%; Hardman Street, 1.5%; the Baltic Triangle, 0.5%; and other nightlife areas in the city centre, 1.0%).

### Alcohol consumption

The majority (92.1%) of nightlife users had consumed alcohol prior to participating in the survey (referred to as drinkers). A quarter (28.4%) of drinkers consumed their first drink before 6pm, whilst 61.2% started drinking between 6pm and 9.59pm, and 10.4% after 10pm. Nearly six in ten (58.9%) drinkers consumed alcohol at home or a friend's house before coming into the city centre for their night out (preloading). Pre-loading was significantly higher for individuals who were not Liverpool residents (non-resident, 68.1%; resident, 50.5%;  $p < 0.05$ ). A fifth (21.6%) of drinkers reported consuming alcohol after leaving home or a friend's house, but prior to arriving in the city centre (en route loading). Nearly of fifth (17.5%) of drinkers reporting en route loading had consumed alcohol on transport/within transport

settings (e.g. taxi, train, airport), whilst 77.5% had drunk at a licensed premise (e.g. local pub, restaurant) and 7.5% on the street or other location. The majority (94.6%) of drinkers had consumed alcohol in a city centre bar, pub or nightclub prior to survey participation. Less than one in 20 (3.2%) drinkers had consumed alcohol in the night-time economy prior to survey participation that was purchased from an off-licence or supermarket (including alcohol they had brought into the city centre with them).

Overall, the median number of units that drinkers consumed prior to survey participation was 11.0 units, with males reporting having consumed significantly more units than females (males, 13.2; females, 9.0:  $p < 0.01$ ). The median number of units drinkers consumed over the course of the night out was: 5.0 units while preloading; 5.1 units during en route loading; 6.2 units in bars, pubs and nightclubs in Liverpool City Centre; and for alcohol consumed in the nightlife area that was purchased from an off-licence or supermarket 6.5 units. The number of units consumed for en route loading was significantly lower for students (student, 3.0; non-student, 5.2:  $p < 0.05$ ). There was also a significant difference between gender in the number of units consumed in the city centre nightlife (prior to survey participation: male, 8.0; female, 5.0:  $p < 0.01$ ). By the time of the survey participation, three quarters (74.2%) of drinkers had consumed spirits<sup>21</sup>, nearly half (46.2%) beer or lager, 27.4% wine, 4.8% cider and 1.1% alcopops.

Survey participants were asked about their intention to drink any alcohol after the survey, during the rest of their night out. The majority (95.7%) of drinkers intended to consume more alcohol during the remainder of their night in the city centre (91.5% of all participants). Of those who intended to consume more alcohol, the median number of units expected to be consumed was 8.0, with males (males, 10.0; females, 6.0:  $p < 0.05$ ) and non-Liverpool residents (non-residents, 10.0; residents, 6.0:  $p < 0.005$ ) intending to consume significantly more than their counterparts. In total the median expected alcohol consumption over the entire night (including alcohol already consumed and expected to be consumed) was 20.0 units. Males expected to consume significantly more units over the entire night out than females (males, 22.7; females, 16.0:  $p < 0.01$ ). Overall, 21.3% of the total alcohol consumed over the course of the night out was drunk while preloading or en route loading prior to entering the city's nightlife. Finally, 13.4% of all participants (13.5% of drinkers) intended to consume more alcohol after leaving the city's nightlife.

### **Drunkenness**

Using a scale of 1 (completely sober) to 10 (very drunk), participants were asked: how drunk they felt at the time of survey; how drunk they thought they would be when they left the city's nightlife that evening; what their ideal level of drunkenness is; and what they thought the typical level of drunkenness was that people reach on a night out in the city centre (Figure

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<sup>21</sup> Including cocktails which were coded as two units.

A5). One in ten (11.8%) of those who had drunk prior to survey participation reported feeling completely sober. The mean score for how drunk drinkers felt at the time of the survey was 4.1. The mean score for how drunk drinkers (including those who had not drunk alcohol prior to the survey but intended to do so on the remainder of their night out) felt they would be when they left the city's nightlife that night was 6.9; there was a significant difference between gender (males, 7.2; females, 6.6:  $p < 0.05$ ). The mean ideal level of drunkenness reported by all participants was 6.3. The mean score reported by participants for the perceived level of drunkenness that people reach on a night out in the city centre was 8.2; there was a significant difference between genders (males, 7.9; females, 8.6:  $p < 0.01$ ).

These scales of drunkenness were grouped into two levels: low (scores one to five) and high (scores six to 10). At the time of the survey, a quarter (26.9%) of drinkers reported their current level of drunkenness as high, while 78.8% of drinkers (including those who had not drunk prior to survey participation but intended to do so during the remainder of the night) expected their level of drunkenness to be high when they left the city's nightlife that night. Seven in ten (70.4%) individuals reported their ideal level of drunkenness as high, whilst the majority (96.0%) thought people on a night out in the city centre typically reached a high level of drunkenness.

Figure A6 shows the median alcohol units drank prior to survey participation by drinkers reporting low and high scores for each drunkenness statement. Those who reported high scores for each of the following drunkenness statements drank significantly more units than those reporting low scores: current drunkenness (high, 16.9 units; low, 9.0:  $p < 0.001$ ) and expected drunkenness upon leaving the city's nightlife (high, 12.1; low, 7.6:  $p < 0.001$ ).

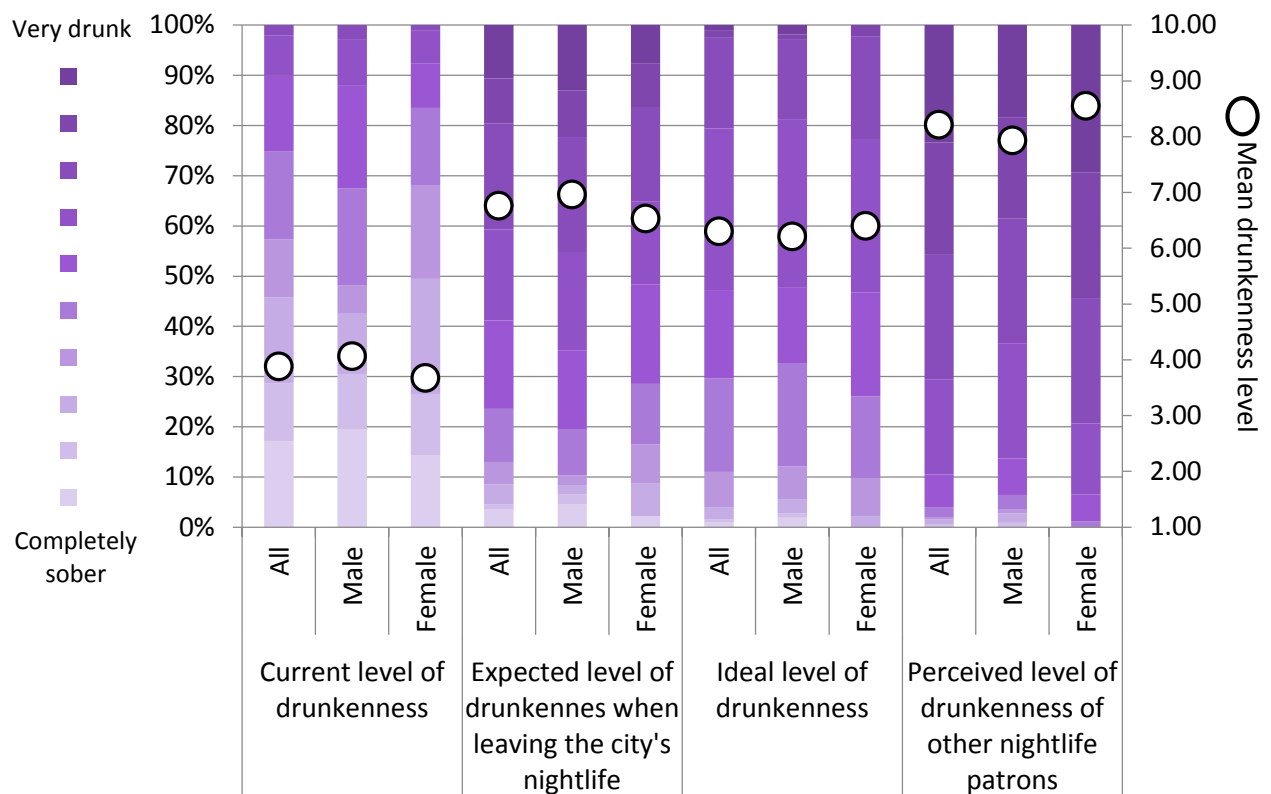
**Table A1: Alcohol consumption over the course of the night out, post-intervention survey**

Alcohol consumption:		Sex				Age group				Student			Liverpool resident		
		All	Male	Female	<i>p</i>	18-21	22-29	30+	<i>p</i>	No	Yes	<i>p</i>	No	Yes	<i>p</i>
Preloading*	%	58.9	56.6	61.6	NS	63.2	59.2	51.1	NS	58.1	60.7	NS	68.1	50.5	<0.05
	Units	5.0	5.1	4.2	NS	5.1	4.1	5.1	NS	5.1	4.1	NS	5.1	4.2	NS
En route loading*	%	21.6	24.2	18.6	NS	19.1	28.2	15.6	NS	25.6	12.5	NS	26.4	17.2	NS
	Units	5.1	5.6	4.6	NS	3.0	6.0	5.1	NS	5.2	3.0	<0.05	4.7	5.6	NS
City centre nightlife - purchased in pubs/bars/nightclubs*	%	94.6	91.9	97.7	NS	91.3	94.4	100.0	NS	95.4	92.9	NS	91.2	97.9	NS
	Units	6.2	8.0	5.0	<0.01	6.0	7.0	6.8	NS	6.5	6.0	NS	8.0	6.0	NS
City centre nightlife - purchased from off- licences/supermarkets*	%	3.2	3.0	3.4	NS	4.3	1.4	4.4	NS	3.1	3.6	NS	4.4	2.1	NS
	Units	6.5	5.0	9.0	<0.05	7.0	5.0	7.5	NS	7.5	4.5	NS	6.0	7.5	NS
Total units consumed prior to survey completion*	Units	11.0	13.2	9.0	<0.01	9.5	11.0	12.0	NS	12.0	10.1	NS	12.8	10.1	<0.05
Expected units consumed post survey^	Units	8.0	10.0	6.0	<0.05	6.8	10.0	8.0	NS	10.0	6.0	NS	10.0	6.0	<0.01
Total units consumed during night out^	Units	20.0	22.7	16.0	<0.01	19.0	20.3	20.8	NS	20.8	18.1	<0.05	24.0	16.8	<0.01

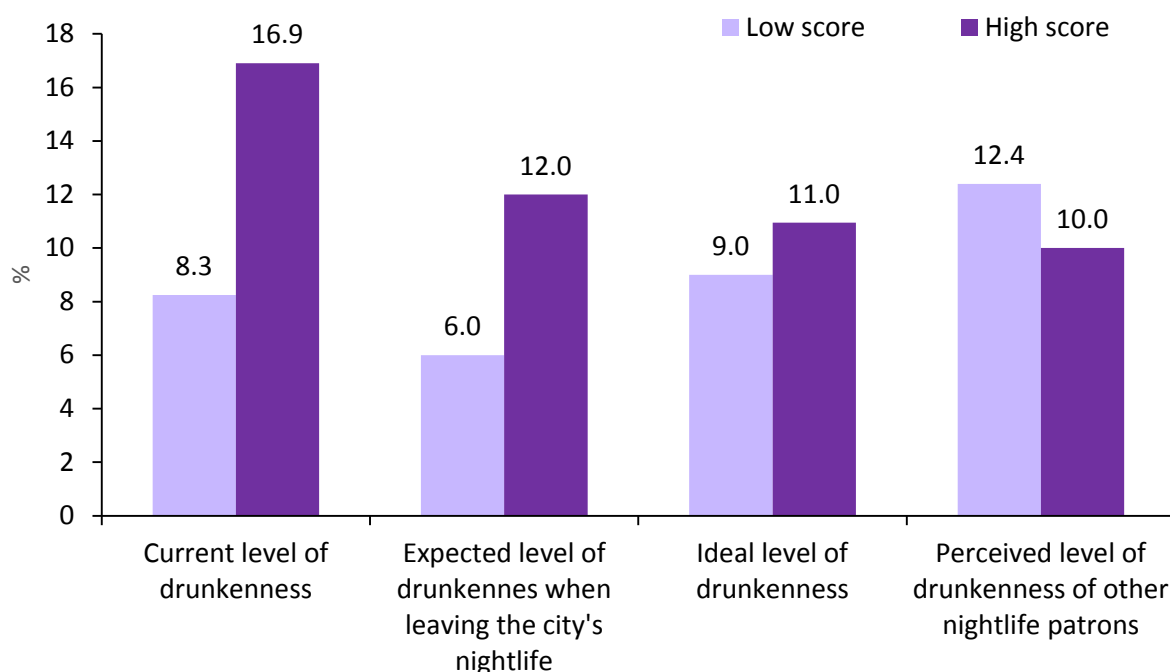
*Note.* Units presented are median value. NS = not significant. \*Of those who had consumed alcohol pre survey only. ^Of those who reported that they would drink alcohol post survey only. +Including reported and, or expected alcohol consumption.



**Figure A5: Participants' perceptions on their and other nightlife users' level of drunkenness, Liverpool post-intervention survey**



**Figure A6: Median alcohol units consumed up to the point of survey of drinkers reporting a low (1-5) or high (6-10) drunkenness rating\* for selected statements on drunkenness, Liverpool post-intervention survey**



\*Drunkenness was rated on a scale of one to 10, with one being completely sober and 10 being very drunk. Ratings of one to five were classed as a low rating and ratings of six to 10 as a high rating.

Participants were then asked how much they agreed or disagreed with a range of statements relating to drunkenness using a five point scale from strongly agree to strongly disagree. The majority (87.5%) of participants agreed (strongly agree and agree) that getting drunk is socially acceptable in Liverpool's nightlife, whilst half (50.7%) also agreed that bar staff do not care if customers get drunk on their premises. Eight in ten (80%) participants agreed the city centre was a safe place to go for a night out, 47.5% agreed that the authorities do not tolerate drunken behaviour in the city's nightlife, and 40.5% that people who get drunk ruin the night out for other people. Over a fifth of participants agreed that: it is hard to enjoy a night out in the city centre if you do not get drunk (22.5%); and the city centre would offer a better night out if people got less drunk (22.4%).

### **Service of alcohol to drunk people**

Participants were asked two questions relating to the service of alcohol to drunk people in licensed premises in Liverpool City Centre. Over two thirds (68.8%) of all participants believed that if someone was drunk and tried to get served alcohol on a night out in the city centre they would usually be served. Participants were then asked if they knew a bar would not serve alcohol to someone who was drunk would they be more likely or less likely to go there. A third (33.3%) of participants reported that they would be less likely to go there, 10.9% were more likely to go there and 55.7% stated that it would not affect their decision to go there.

### **Perceptions of the law on serving alcohol to, and purchasing alcohol for, drunks**

A quarter (26.0%) of participants thought it was legal for a bar server to sell alcohol to someone who was already drunk, with two thirds (65.5%) stating it was illegal and 8.5% reporting they did not know. A third (33.5%) of all participants thought it was legal to buy alcohol for a friend who was already drunk, while over half (55.0%) thought it was illegal and 11.5% did not know.

