A Multi-Agency Community-Based Intervention to Reduce Excessive Drinking in Cardiff City Centre

Final Report
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Foreword

The relationship between alcohol misuse and health is well established. Together with an increasing trend towards zones of high-volume licensed premises establishing densely packed entertainment zones in urban centres, alcohol and binge-drinking has become further associated with disorder and violence. This 21st century binge culture has developed an identity that brings local government, the police, licensees and clients of the night-time economy together. The pursuit of leisure is characterised by freedom for self-determination in an exuberant urban centre. However, media reports portray the majority of drinkers as lawless, irresponsible binge drinkers on a path to self-destruction taking with them the local environment. It was therefore timely that a multi-agency collaboration initiated by Cardiff Community Safety Partnership (including the Substance Misuse Action Team and South Wales Police) and involving Cardiff University brought together practitioners from a broad set of disciplines to investigate alcohol misuse in Cardiff city centre and act on findings from this research.

“This is an extremely important piece of work. I wholly endorse the work of this project; it's through a partnership approach that the best results can be gained in tackling binge drinking and related problems such as anti-social behaviour. The project systematically got to the root of the problems in Cardiff city centre by using community based intervention and this has to be the way forward. All the key partners can use this report to further their excellent work to improve the drinking habits of Cardiff residents and visitors while improving the offer of Cardiff as a night time destination.”

Councillor Judith Woodman
Executive Member for Social Care and Justice, Cardiff Council
Joint Chair of the Cardiff Community Safety Partnership

“I commend the work of the Lion’s Breath team which could help influence the way alcohol and night-time related issues are addressed in Cardiff in the future. The project's findings have identified a number of areas in which we, as a Partnership, are working well, but also a number of potential improvements. We fully appreciate that Cardiff is effectively a 24-hour city these days, but that its infrastructure needs to operate at a level that will maintain Cardiff’s reputation as a safe city and one that welcomes visitors from all over the world. I also hope the report can act as a form of ‘early warning’ to those who drink excessively and to educate them to drink more sensibly, enjoy themselves and get home safely – which thankfully, the majority of people do.”

Chief Superintendent Bob Evans,
South Wales Police Divisional Commander for Cardiff Joint
Chair of the Cardiff Community Safety Partnership
1 Executive summary

This project’s purpose was the reduction of alcohol-related harm in Cardiff city centre through a sustainable community-based intervention. The project developed existing methodologies (Holder 2000) to examine levels of intoxication in Cardiff city centre, audit hotspot city centre locations and individual drinkers for binge drinking and disorder and to share this information with key partners.

The project used three strategies to reduce alcohol-related problems in Cardiff city centre:

i. Development and implementation of city centre and individual risk assessments (including an alcometer survey)

ii. Improvement of the regulation of licensed premises and reduction of alcohol miss-selling through feedback of risk assessments to licensees and the CCSP (including the licensing committee)

iii. Provision of funded licensed premises server training to staff.

Drinker and environmental surveys were carried out between the hours of 11pm and 3am on one Friday and one Saturday each month for twelve months. Surveyors questioned and breathalysed respondents, and audited the immediate environment for evidence of disorder and risk. The project brought together licensees, South Wales Police (SWP), Cardiff Substance Misuse Action Team and Cardiff University to tackle alcohol misuse and disorder in Cardiff city centre in the context of existing, well-developed partnership activity. The project successfully engaged the local community, including bar staff, through a positive media campaign and targeted server training. The public campaign emphasised the positive aspects of Cardiff and how disorder and alcohol misuse were being successfully targeted through this and other community interventions.

The survey provided a unique insight into the night-time economy. It was concluded that;

1. Number of underage drinkers was very low: less than 2% of drinkers
2. One third of drinkers were below the drink drive limit
3. One third of male drinkers and one fifth of female drinkers were more than twice the UK drink drive limit according to breathalyser data
4. Males outnumbered females in the city centre by around 2 to 1
5. Three quarters of respondents were non-smokers
6. 60% of respondents used taxis to get home: only 2.6% used public transport. More men than women walked home
7. Public litter comprised pub and club advertising material, food wrappers and glass bottles
8. RBS training did not affect blood alcohol levels
9. Slurred speech was found to be the best indicator of drunkenness
10. 40% of males and 25% of females had slurred speech
11. Interviews identified problem premises, facilitating targeted training
Recommendations

1. Surveys such as this, organised on a partnership basis, should be instituted in the night-time economy to identify alcohol misuse
2. Responsible drinking campaigns should be targeted at males in particular
3. Existing measures to curb underage city centre drinking are effective and should be maintained
4. Transport policy in the night-time economy should focus on taxi services much more than on public transport services
5. Half-hourly removal of food wrappers, advertising flyers and glass bottles from the street should be a major priority
6. From this study in-house server training does not need to be supplemented by additional training
7. Reliable tests of drunkenness are needed: from these findings the best option would be a new verbal test
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A Multi-Agency Community-Based Intervention to Reduce Excessive Drinking in Cardiff City Centre

3 Introduction

3.1 Original Objectives and Background

This project’s purpose was the reduction of alcohol-related harm in Cardiff city centre through a sustainable community-based intervention. The project developed existing methodologies (Holder, 2000) to examine levels of intoxication in Cardiff city centre, audit hotspot city centre locations and individual drinkers and to share this information with key partners. Funding enabled the set up, purchase of materials, surveys and delivery of interventions and the development of a network of community practitioners within the CCSP responsible for the long-term reduction of alcohol-related harm. The project worked with other Cardiff Community Safety Partnership projects targeting alcohol misuse and disorder (see Appendix 6.1).

The project used three strategies to reduce alcohol-related problems in Cardiff city centre:-

a) Development and implementation of city centre and individual risk assessments (including an alcometer survey).

b) Improvement and the regulation of licensed premises and reduction alcohol miss-selling through feedback of risk assessments to licensees and the CCSP (including the licensing panel).

c) Provision of funded licensed premises server training to staff.

The project ran from December 2004 to May 2006 and was piloted in April 2004 (see Appendix 6.2). Surveys were conducted monthly from December 2004 to December 2005 and collected information on disorder and alcohol miss-selling in Cardiff city centre. The project was co-ordinated by a Project Co-ordinator (Bryany Cusens and then Nick Perham).

The first six surveys collected baseline measures and the following seven surveys examined the impact of the intervention. The intervention took the form of:

- Targeted (using baseline survey data) British Institute of Inn keeping Awarding Body (BIIAB) accredited server training, funded by CCSP, provided to licensees and their staff.
- Communicating survey findings to local government and the police to encourage responsible server behaviour

Dependent measures included output from the risk audits, survey data, police data, and anonymised A&E assault-related injury data.

There are known associations between intoxication and harm and, although licensees are legally obliged (Licensing Act, 1964) to refuse service to intoxicated clients, evidence suggests miss-selling regularly occurs (e.g., Maguire & Nettleton, 2003). If licensees were more attentive when serving alcohol then this could lead to a reduction in severe intoxication and therefore alcohol-related harm.

Assessing the prevalence of alcohol misuse using alcometer surveys had not been conducted in the UK, although similar studies have had positive results in the US (e.g., Surveyor Training Manual for Field Data Collections: Border Breath-test Surveys; Lange, et al., 1999). The method developed in the current project determined breath alcohol (BA) levels in licensees’ clients in the late evening and
early morning as clients exited premises onto the street.

There are known behavioural consequences and risks associated with intoxication (i.e., 0.08% milligrams of alcohol per 100 millilitres of blood is the UK drink drive limit, vomiting occurs around 0.10-0.12%, balance and movement are severely impaired around 0.15-0.30% and 0.45% represents a lethal dose, (Greely & McDonald, 1992). Thus, information about establishments that repeatedly miss-sell alcohol (i.e., whose clients exhibit excessive BA levels) can be used to (a) enforce the regulation of these establishments, (b) motivate those establishments to develop good server skills in their staff and (c) engage the public in a sensible drinking campaign.

Coupled with the behaviour associated with intoxication, other situational factors are indicators of alcohol-related antisocial behaviour and increase environment risk (Homel, et al., 1992). For example, intrusive music from licensed premises into pedestrian areas heightens risk, and vomit, broken glass and urine on the street are evidence of disorder. The following factors were recorded (adapted from the Home Office Alcohol Misuse Enforcement Campaign and informed by published risk audits, Homel, et al., 1992):-

- Obvious signs of drunkenness (e.g., individuals staggering)
- Verbal abuse, including shouting and swearing (recorded by surveyors throughout the session and time of incident)
- Evidence of disorder in groups waiting for transport; recorded by surveyors throughout the session and time of incident
- Intrusive music from licensed premises; recorded by surveyors throughout the session
- Evidence of public urination; recorded hourly by surveyors throughout the session
- Evidence of public vomiting; recorded hourly by surveyors throughout the session
- Visual and auditory evidence of breaking glass; recorded by surveyors throughout the session
- Visible signs of violence; recorded by surveyors throughout the session
- Litter on the street and the use of litter bins

Focusing on visible signs of disorder and risk offered a unique opportunity to examine and quantify the problem of alcohol-related disorder: specifically, information on respondents’ level of drunkenness (surveyor-rated and measured using the alcometer), where they have consumed alcohol that evening, together with basic demographic information indicating risk. These data were disclosed to the relevant city authorities so that they could decide whether to further reduce miss-selling through challenging licences and developing responsible serving practices (i.e., through the BIIAB).

Furthermore, reducing excessive drinking in the city centre was expected to reduce both visible signs of disorder (evaluated through analysis of the survey data) and to reduce alcohol-related harm, evaluated through ongoing analysis of police and A&E data – this is now standard practice in the city, having been refined in the Home Office funded TASC project (1999-2002), a project inaugurated by the Cardiff Violence Prevention Group (1996-1999) and that this intervention is closely associated with (Maguire & Nettleton, 2003). Relevant agencies and the public were engaged in the project through the involvement of a public relations specialist who released regular press releases to the local media and arranged interviews with members of the project team.
If miss-selling occurs then respondents are expected to have blood-alcohol levels above those normally expected if licensees had not sold alcohol to the already inebriated and will exhibit behavioural evidence of their intoxication. Thus, reduction of miss-selling should reduce the number of individuals showing high levels of intoxication and alcohol-related disorder.

The intervention raised awareness of alcohol misuse in drinkers, licensees (both on- and off-sales), relevant agencies and the public through existing partnerships (principally the CCSP), including the Licensees Forum. Findings were also sent to the Antisocial Behaviour Order Sub-group, Substance Misuse Action Team, Cardiff Planning Department, and other key parties, including targeted local media. By these means, licensees identified in the survey as miss-selling alcohol were strongly encouraged to develop responsible serving practices and to submit staff to the BIIAB server training programme. The intervention involved a short newsletter detailing alcometer and risk audit findings including anonymous information on participants who exhibit high BA levels and where they had been drinking. Anonymous information on disturbances, violent incidents and alcohol-related injury in the city centre were also summarised. Importantly, these data were agenda items in CCSP task groups, ensuring appropriate action and closure of audit loops.

The Project Co-ordinator attended CCSP meetings to provide feedback. The management committee also engaged with parallel community programmes. The CCSP was to target substance misuse in families and work towards helping young people to achieve their full potential in society. The Lions Breath (LB) project team worked closely with the CCSP to forward CCSP goals. To facilitate full integration, the chairs of the CCSP Violence and Substance Misuse Groups
were members of the management committee. Project objectives were also fully consistent with the goals of SWP and its members, and a representative from the Licensees Forum, sat on the project committee.

3.2 Methodology

3.2.1 Materials and methods

Ethical approval was provided by the Medical and Dental School Research Ethics Committee, Cardiff University and SWP were consulted on all aspects of the research.

Two groups of surveyors, working in pairs, were stationed at one of three locations around the city (see Figure 1). Pilot work (see Appendix 6.2) suggested surveyors could not expect respondents to stand around for more than five minutes. For this reason, and due to the potentially volatile nature of the area surveyed, the survey was kept short (see Appendix 6.4). The three survey locations were selected due to their high density of licensed premises, because they were well lit, because of the number of drinkers in those areas and were visibly policed (to insure surveyors safety). The survey was conducted between the hours of 11pm and 3am one Friday and one Saturday each month across twelve months. Surveyors were asked to monitor the immediate environment (see Appendices 6.3.5 and 6.3.6 for audit questionnaires) and record incidences of disorder (see below), and the survey required information on the named location of where respondents had consumed alcohol. To enhance random sampling, every seventh person to cross a pre-selected line was asked to participate in the survey. Those agreeing to participate provided verbal information recorded on a short, written questionnaire (see Appendix 6.4) and their BA concentration was recorded using a Lion Laboratories SD-400 alcometer. Upon completion participants were thanked for their time and offered a lollipop. Surveyors also collected information on the local weather conditions, putatively associated with measures of well-being.

The principal independent measure, Percent Blood Alcohol Content (PBAL), was derived from BA levels ascertained with a Lion Laboratories SD-400 alcometer. A reading was taken once the written survey was complete and if the participant agreed to provide a reading. Participants who were drinking alcohol or smoking at the time of interview were not offered an alcometer test as these activities might affect results or damage the alcometer. The test was conducted following manufacturer’s guidelines. Participants were instructed to take a deep breath and blow through a disposable applicator into the alcometer. The alcometer was programmed to determine whether sufficient deep lung breath had been collected for analysis. If the machine indicated a failure, then participants were offered another opportunity to provide a reading. The alcometers were recalibrated once every three months at the manufacturer’s laboratory.

The individual questionnaire involved recording information provided by respondents and also required surveyors to subjectively rate aspects of respondents’ physical characteristics and demeanour. In order to assess inter-rater reliability, the second surveyor in the pair completed the same subjective ratings on the reverse of the individual questionnaire.

At the end of the survey respondents were debriefed, had any questions they had answered and offered a piece of lollipop as a show of appreciation for their time. They were also offered an A5 piece of paper with a more detailed description of
the project, contact information for the Project Co-ordinator and a web address where they could monitor the progress of the project (www.lions.cf.ac.uk).

The three areas surveyed were either pedestrianised or conducted on wide pavements at the side of the road. In each case a clear boundary was present: either the area of the pedestrianised zone or the length of the pavement. Once every hour during each survey, one pair of surveyors conducted an audit that lasted around 10 minutes (see Appendix 6.3.6). First, surveyors rated their own safety and fear on a scale of 1 to 10, with 10 being the most safe and most fearful. Second, the weather was classified into the categories rain, snow, drizzle or clear and the temperature categories were freezing, chilly, frosty, neutral, warm or hot. Next, surveyors recorded the frequency of vomiting, broken glass, blood patches and public urination from visible signs in the environment. Street litter quantities were classified according to the categories none, under five items, six to ten items, eleven to fifteen items, sixteen to twenty items or over twenty items. These scales were used across four types of litter: food wrappers, glass items, polycarbonate containers and other, such as advertising flyers from licensed premises. Surveyors also noted noise levels emanating from nearby licensed premises classifying noise into the categories perceptible or loud and the name of the premises were noted.

Surveyors noted any visible signs of drunken behaviour for both individuals and groups according to the categories none, fewer than five, six to ten and over ten. They were further asked to note any incidents of public prostitution, categorised as absent, present or ambiguous. They further looked for evidence of drug use such as silver foil, roaches, phials, zip bags, syringes and other forms of drug paraphernalia. Inoperative street lighting and the state of waste bins, whether they were full, overflowing or empty, was noted. In general, surveyors were encouraged to record their perceptions of the environment and record noteworthy instances that were not explicitly covered by the audit form. For example, the general atmosphere, numbers of police vans, helicopters and ambulances as well as particular instances of violence and antisocial behaviour.

Finally, surveyors took a rough head count of the number of males and females in the immediate area by counting the number of men and women in the area surveyed for five minutes. Additional to the hourly audit both pairs of surveyors kept an ongoing audit that recorded instances of antisocial behaviour on an hour of survey by antisocial behaviour type matrix (see Appendix 6.3.5). For example, if a surveyor heard glass being broken they would place a tick in the ‘breaking glass’ box for that particular hour.

The antisocial behaviours recorded were visual or auditory evidence of breaking glass, any antisocial behaviour such as spitting, public urination or aggressive gesturing, any evidence of aggressive shouting such as abusive, threatening of aggressive verbalisations, any aggressive/disorderly behaviour such as throwing things, aggression towards property, and finally, any visible signs of violence such as pushing, kicking, shoving, hitting, using weapons or arrests due to violence. As with the hourly audit, surveyors also had the opportunity to record any other observations of the Night-Time Economy (NTE) pertaining to the general atmosphere or specific instances.

### 3.2.2 Participants

1,256 participants were approached of which 344 either refused, or failed, to provide an alcometer reading.
3.2.3 Measures

The alcometer provided a reading of intoxication in micrograms ethanol/100ml a measure which was converted to milligrams ethanol/100ml, the metric most commonly used to discuss intoxication.

Surveyors recorded the date and time of survey on each response sheet. Respondents were also asked to provide their date of birth. This information was used to calculate respondents’ age.

3.2.4 TASC data

Police data (TASC) for all alcohol-related disorder in Cardiff city centre served as a dependant measure. The area covered by the TASC dataset includes the city centre and the Bay area, areas that were also covered by the LB server training intervention. TASC data is collated by an analyst employed by South Wales Police using records from four data systems:

<table>
<thead>
<tr>
<th>Information system</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incident</td>
<td>1,926</td>
<td>15.18</td>
</tr>
<tr>
<td>Crime</td>
<td>2,174</td>
<td>17.14</td>
</tr>
<tr>
<td>CCTV</td>
<td>22</td>
<td>0.17</td>
</tr>
<tr>
<td>A&amp;E</td>
<td>1,277</td>
<td>10.07</td>
</tr>
<tr>
<td>Incident, Crime</td>
<td>2,066</td>
<td>16.29</td>
</tr>
<tr>
<td>Incident, Crime, CCTV</td>
<td>866</td>
<td>6.83</td>
</tr>
<tr>
<td>Incident, CCTV</td>
<td>142</td>
<td>1.12</td>
</tr>
<tr>
<td>Crime, CCTV</td>
<td>402</td>
<td>3.17</td>
</tr>
<tr>
<td>Incident, A&amp;E</td>
<td>830</td>
<td>6.54</td>
</tr>
<tr>
<td>Crime, A&amp;E</td>
<td>512</td>
<td>4.04</td>
</tr>
<tr>
<td>Incident, Crime, A&amp;E</td>
<td>1,600</td>
<td>12.61</td>
</tr>
<tr>
<td>Incident, Crime, CCTV, A&amp;E</td>
<td>551</td>
<td>4.34</td>
</tr>
<tr>
<td>Incident, CCTV, A&amp;E</td>
<td>66</td>
<td>0.52</td>
</tr>
<tr>
<td>Crime, CCTV, A&amp;E</td>
<td>53</td>
<td>0.42</td>
</tr>
<tr>
<td>CCTV, A&amp;E</td>
<td>11</td>
<td>0.09</td>
</tr>
<tr>
<td>Other(^1)</td>
<td>188</td>
<td>1.48</td>
</tr>
</tbody>
</table>

\(^{1}\) When data were first compiled information custody sheets were also examined. These data, however, duplicated information already on other systems and this source was eventually dropped.

For the purposes of subsequent analyses reported here, the only records used in
analyses of TASC data were those recorded on a Friday or Saturday evening and between the hours of 10pm and 3am, commensurate with the survey data.

4 Results

The extent that respondents completed the survey varied from a full set of answers to minimal information. For example, of those responding, 935 provided their date of birth and 893 respondents were breathalysed.

Figure 2 – Count of respondents providing a valid breath test by date and gender

For operational reasons (primarily centred on difficulties recruiting surveyors) no surveys were conducted in September. On average, 38 (see Figure 2) respondents were breathalysed each survey evening. Preliminary analyses of data from December 2004 indicated a greater proportion of men. This was unexpected and in consequence the methods were revised so that a head count of men and women in the environment could be conducted during the survey. These headcount data are discussed further below but indicated that the bias towards men did not constitute a sampling bias as there were more men than women in the city centre.

4.1 Descriptive analyses

4.1.1 Age

Respondents’ age provides a valuable insight into the demographics of NTE clients. TASC data had previously indicated (see Figure 3) that approximately 5% of those involved in city centre disorder were under 18 years of age. It is plausible that these data can be generated through under-eighteens purchasing
alcohol outside the city centre and then travelling to the city centre where they became involved in disorder. It is therefore difficult to know the extent that Cardiff licensed trade contributes towards underage drinking and disorder. Furthermore, research by Tremblay and colleagues (e.g., Nagin & Tremblay, 1999) suggests aggression is heightened across childhood and adolescence, diminishing as juveniles grow into adulthood and subsequently acquire mechanisms of self-control. If true then we would expect an overrepresentation of youth in police data, compared to the actual population.

Age data were derived from respondents’ date of birth and date of survey. 15 respondents provided a date of birth that indicated that they were below 18 years of age and 12 provided positive PBAL scores, 3 males (0.35% of all drinkers surveyed) and 9 females (1.06% of all drinkers surveyed; see Table 3).

Table 2 – Descriptive statistics for Age (years)

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>59.31</td>
<td>54.32</td>
</tr>
<tr>
<td>Minimum</td>
<td>16.24</td>
<td>16.99</td>
</tr>
<tr>
<td>Mean</td>
<td>24.97</td>
<td>24.66</td>
</tr>
<tr>
<td>SD</td>
<td>6.41</td>
<td>7.02</td>
</tr>
<tr>
<td>Observations</td>
<td>603</td>
<td>332</td>
</tr>
</tbody>
</table>

No significant difference in age by gender was noted in the sampled population ($t < 1$, two tailed).

Table 3 – Underage drinkers’ data including surveyor ratings (the names of premises are removed from this report)
Conclusion. The prevalence of underage drinking in Cardiff city centre may be subject to a downward bias through underage drinkers either providing a false date of birth or avoiding the survey altogether. Considering these data, a smaller proportion of under-eighteen year olds were surveyed compared with the available TASC data; this is consistent with Tremblay’s position that as age increases aggression decreases. The under-eighteen year olds surveyed suggests the majority are only a few months from their eighteenth birthday and thus possibly indistinguishable from eighteen year olds without formal ID requests from licensed premises. These findings suggest that the survey does not provide evidence for an under eighteen year-old drinking problem in Cardiff city centre for those areas surveyed. Such inferences are, however, subjective. If the number of sampled under-eighteen year olds is a true reflection of the extent of underage drinking in Cardiff, and assuming that an average 40,000 drinkers visit the city centre on an average Friday or Saturday night, then an estimated proportion of those 40,000 drinkers who are underage is 670. This latter figure is subject to the above caveats concerning underage drinkers’ willingness to participate in the survey and to provide accurate information. Underage drinkers may be more interested in being breathalysed, compared to the over eighteen population, in which case the figure of 670 should be revised downwards.

Although it is the opinion of the authors of this report that underage drinking may not be a significant problem in Cardiff city, an established method is available to tackle underage drinking: specifically, requiring the on- and off-licensed trade to check ID irrespective of their customers’ assumed age.

4.1.2 Venues

Respondents were asked where they had consumed their last drink prior to being surveyed and where they had consumed most drinks that drinking session. In
total, 137 different licensed premises were named as the ‘last drink’ venue and 196 different licensed premises were named as the ‘most drinks’ venue. Distribution of premises was considerably skewed towards premises adjacent to the survey location. Evidence for this skew is found in the lack of respondents stating they had drunk in Cardiff University’s Students’ Union despite the Students Union being the largest licensed premise in South Wales by capacity. The Students Union is also located in a city centre location. However, students accounted for only 27% of those interviewed and this venue was named less than ten times. This bias may be attributable to the distance between the Students Union and the survey locations.

10 respondents stated that they had consumed their last drink at home, whereas 43 respondents said they had consumed most drinks at home. Six respondents had consumed most drinks and their last drink at home.

Table 4 – Number of observations and mean PBAL for last-drink premises where observations are greater than 10 (names of premises are removed from this version of the report).

<table>
<thead>
<tr>
<th>Rank</th>
<th>Premises</th>
<th>Average</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>0.155</td>
<td>0.039</td>
<td>0.101</td>
<td>0.214</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>0.141</td>
<td>0.071</td>
<td>0.016</td>
<td>0.294</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>0.135</td>
<td>0.070</td>
<td>0.000</td>
<td>0.315</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>0.130</td>
<td>0.070</td>
<td>0.000</td>
<td>0.331</td>
<td>80</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>0.127</td>
<td>0.058</td>
<td>0.000</td>
<td>0.225</td>
<td>17</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>0.127</td>
<td>0.075</td>
<td>0.000</td>
<td>0.306</td>
<td>37</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>0.123</td>
<td>0.057</td>
<td>0.012</td>
<td>0.209</td>
<td>20</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>0.123</td>
<td>0.054</td>
<td>0.023</td>
<td>0.221</td>
<td>16</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>0.122</td>
<td>0.073</td>
<td>0.000</td>
<td>0.320</td>
<td>50</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>0.118</td>
<td>0.067</td>
<td>0.000</td>
<td>0.248</td>
<td>60</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>0.117</td>
<td>0.063</td>
<td>0.000</td>
<td>0.242</td>
<td>44</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>0.110</td>
<td>0.056</td>
<td>0.023</td>
<td>0.237</td>
<td>20</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>0.109</td>
<td>0.057</td>
<td>0.000</td>
<td>0.239</td>
<td>79</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>0.109</td>
<td>0.065</td>
<td>0.000</td>
<td>0.276</td>
<td>76</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>0.107</td>
<td>0.073</td>
<td>0.000</td>
<td>0.283</td>
<td>35</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>0.107</td>
<td>0.057</td>
<td>0.000</td>
<td>0.200</td>
<td>17</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>0.101</td>
<td>0.045</td>
<td>0.032</td>
<td>0.189</td>
<td>17</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>0.097</td>
<td>0.060</td>
<td>0.000</td>
<td>0.189</td>
<td>19</td>
</tr>
</tbody>
</table>

Table 5 – Number of observations and mean PBAL for most-drink premises where observations are greater than 10 (names of premises are removed from this version of the report).

<table>
<thead>
<tr>
<th>Rank</th>
<th>Premises</th>
<th>Average</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>0.141</td>
<td>0.081</td>
<td>0.000</td>
<td>0.311</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>0.127</td>
<td>0.061</td>
<td>0.021</td>
<td>0.209</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>0.127</td>
<td>0.072</td>
<td>0.016</td>
<td>0.294</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>0.125</td>
<td>0.062</td>
<td>0.000</td>
<td>0.230</td>
<td>37</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>0.125</td>
<td>0.061</td>
<td>0.000</td>
<td>0.239</td>
<td>40</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>0.119</td>
<td>0.074</td>
<td>0.000</td>
<td>0.248</td>
<td>29</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>0.115</td>
<td>0.055</td>
<td>0.014</td>
<td>0.228</td>
<td>29</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>0.113</td>
<td>0.076</td>
<td>0.000</td>
<td>0.320</td>
<td>24</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>0.113</td>
<td>0.051</td>
<td>0.044</td>
<td>0.242</td>
<td>13</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>0.112</td>
<td>0.061</td>
<td>0.000</td>
<td>0.239</td>
<td>14</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>0.112</td>
<td>0.068</td>
<td>0.000</td>
<td>0.283</td>
<td>56</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>0.112</td>
<td>0.073</td>
<td>0.000</td>
<td>0.225</td>
<td>18</td>
</tr>
</tbody>
</table>
Three issues concern how these data should be interpreted. First, the survey was biased towards premises adjacent to or in the area surveyed. Interpreting PBAL levels as indicative of the true range of mean PBAL by establishment in Cardiff is thus inappropriate. There may be premises with clients far drunker than those observed here and that do not register in the survey simply because of where the surveys were located.

Second, clients 'pub-hop', moving from one licensed premise to another; a subset consume alcohol at home and some drink on the street. Although the above premises might sell alcohol to the already intoxicated it may be the case that these premises only sold one alcohol beverage to the person concerned and that that beverage might have been purchased by a conspecific rather than the person surveyed.

Finally, and most importantly, licensees are legally required to prevent further consumption in their premises by the already inebriated. Fundamental to this requirement is the view that intoxication is an easily observed and measured phenomenon. This is not the case as intoxication, defined in this project as PBAL, is not observable. Thus licensees are required to use proxy measures, most likely observable behaviour, in order to assess how drunk their clients are. It is feasible that heavily intoxicated individuals do not display behaviours associated with intoxication. This issue is currently subject to greater scrutiny (see Perham, Moore, Shepherd & Cusens, 2006) with analyses by Perham and colleagues suggesting a respondent’s eyes, speech and ability to walk may provide reasonable proxies to PBAL. In their analyses using the same cross sectional survey data reported here, Perham and colleagues looked at the transition from clear eyes to glazed eyes, from clear speech to slurred speech and from walking normally to staggering (see Section 4.1.13 for further information) across men and women. They calculated the likely minimum respondent’s PBAL in order to display that behaviour.

Table 6 – PBAL transitions for behaviours associated with intoxication

<table>
<thead>
<tr>
<th>Likely minimum PBAL (mg/100ml)</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glazed eyes</td>
<td>0.083</td>
<td>0.092</td>
</tr>
<tr>
<td>Slurred speech</td>
<td>0.141</td>
<td>0.147</td>
</tr>
<tr>
<td>Staggering walk</td>
<td>0.203</td>
<td>0.213</td>
</tr>
</tbody>
</table>

Perham et al.’s data suggests men and women who are staggering are expected to have a minimum PBAL of 0.20. However, although a premises’ clients may become more intoxicated than other premises’ clients, it may not be the case that they look more drunk. We therefore calculated the proportion of the 'last drink’ premise’s clients who were staggering. Table 7 presents both the proportion of respondents who were staggering by premise and that premise’s rank position in Table 4 and whether they had participated in the LB server training scheme (see Section 4.5, below, for further information).
Table 7 – Percentage of respondents staggering by location of their last drink with PBAL rank derived from Table 4 (names of premises are removed from this version of the report).

<table>
<thead>
<tr>
<th>Percent staggering</th>
<th>PBAL rank</th>
<th>Passed Server Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>41.18</td>
<td>8</td>
<td>No</td>
</tr>
<tr>
<td>40.23</td>
<td>13</td>
<td>No</td>
</tr>
<tr>
<td>38.18</td>
<td>9</td>
<td>No(^a)</td>
</tr>
<tr>
<td>37.50</td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>33.73</td>
<td>14</td>
<td>Yes</td>
</tr>
<tr>
<td>31.91</td>
<td>11</td>
<td>Yes</td>
</tr>
<tr>
<td>31.25</td>
<td>4</td>
<td>No</td>
</tr>
<tr>
<td>30.65</td>
<td>3</td>
<td>Yes</td>
</tr>
<tr>
<td>30.43</td>
<td>7</td>
<td>No</td>
</tr>
<tr>
<td>30.00</td>
<td>18</td>
<td>No</td>
</tr>
<tr>
<td>28.57</td>
<td>15</td>
<td>No(^a)</td>
</tr>
<tr>
<td>27.78</td>
<td>10</td>
<td>Yes</td>
</tr>
<tr>
<td>26.32</td>
<td>6</td>
<td>No</td>
</tr>
<tr>
<td>23.53</td>
<td>4</td>
<td>Yes</td>
</tr>
<tr>
<td>18.18</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>17.65</td>
<td>17</td>
<td>Yes</td>
</tr>
<tr>
<td>16.67</td>
<td>16</td>
<td>No(^a)</td>
</tr>
<tr>
<td>15.00</td>
<td>12</td>
<td>Yes</td>
</tr>
</tbody>
</table>

\(^a\) Although Jumpin Jaks, Edwards and Great Western did not have any staff that passed the server training exercise, they did initially refer staff for training. It is assumed that these staff were unable to take the exam before their training period expired.

From Table 7 we argue that licensed premises in which the LB training programme was not adopted by managers were associated with a greater proportion of staggering and inebriated patrons.

The relationship between premises managers’ motivations to participate in the LB study and levels of alcohol misuse are further highlighted in the following table. Those premises from which no staff were referred for training (Training Status B; see Table 8) are situated in the top half of the table suggesting a greater relationship with excessive intoxication as measured by PBAL and overt behaviours associated with inebriation (staggering).

Table 8 – Premises with trained and untrained staff by rank position on both PBAL and proportion of staggering patrons (names of premises are removed from this version of the report).

<table>
<thead>
<tr>
<th>Training Status</th>
<th>Premise (with no. respondents)</th>
<th>PBAL Average</th>
<th>Staggering %</th>
<th>Sum of Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Rank</td>
<td>Rank</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>0.141</td>
<td>2</td>
<td>37.50</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>0.123</td>
<td>8</td>
<td>41.18</td>
<td>1</td>
</tr>
<tr>
<td>A</td>
<td>0.135</td>
<td>3</td>
<td>30.65</td>
<td>8</td>
</tr>
<tr>
<td>B</td>
<td>0.130</td>
<td>4</td>
<td>31.25</td>
<td>7</td>
</tr>
<tr>
<td>C</td>
<td>0.122</td>
<td>9</td>
<td>38.18</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>0.109</td>
<td>13</td>
<td>40.23</td>
<td>2</td>
</tr>
</tbody>
</table>
Training Status Code: A, referred staff and at least one member of staff passed; B, did not refer staff; C, referred staff but none sat the exam.

4.1.3 Ethnicity

84% of respondents who provided information on their ethnic background described themselves as White-British. Included in the survey were respondents from Eire, Australia, New Zealand and France characterising Cardiff city centre as a venue for events that attract an international audience.

4.1.4 Drug use

Respondents were asked whether they had taken illegal drugs that evening. 737 respondents answered and 29 (3.93%) stated that they had. However, the accuracy of these data is likely biased downwards given the surveys association with the police and the level of high visibility policing in the areas surveyed.

4.1.5 Session Duration

Respondents were asked to estimate the time of their first drink in that days drinking session. From this information and the time of the survey session duration, in hours, was derived. A significant difference in duration was noted between men and women ($t = 5.296$, $p < 0.001$, two tailed; see Table 9) with men on average drinking for 82 minutes longer than women. As noted from venue information, some respondents had been previously drinking outside Cardiff city centre. Thus, the duration spent drinking may not reflect the amount of time people spend in the city centre. Moreover, respondents drank for longer on Saturday (mean duration = 7.04 hours, SD = 3.53) compared to Fridays (mean duration = 6.30 hours, SD = 3.01; $t = 2.95$, $p < 0.01$, two-tailed). This is most likely due to respondents being able to start drinking earlier in the day as they would not be working.

28% of respondents providing a non-zero PBAL score had been drinking from four to eight hours (see Figure 4). Pearson's correlation coefficient suggests a positive association between session duration and PBAL ($r = 0.238$, $p < 0.001$; see Figure 5). These results suggest the longer a respondent drinks the drunker they get and may also suggest that a longer duration does not necessarily imply consumers will pace their consumption.

<table>
<thead>
<tr>
<th>Training Status</th>
<th>Premise (with no. respondents)</th>
<th>PBAL Average</th>
<th>PBAL Rank</th>
<th>Staggering %</th>
<th>Staggering Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td></td>
<td>0.155</td>
<td>1</td>
<td>18.18</td>
<td>15</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>0.123</td>
<td>7</td>
<td>30.43</td>
<td>9</td>
</tr>
<tr>
<td>A</td>
<td></td>
<td>0.117</td>
<td>11</td>
<td>31.91</td>
<td>6</td>
</tr>
<tr>
<td>A</td>
<td></td>
<td>0.127</td>
<td>5</td>
<td>23.53</td>
<td>14</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>0.127</td>
<td>6</td>
<td>26.32</td>
<td>13</td>
</tr>
<tr>
<td>A</td>
<td></td>
<td>0.109</td>
<td>14</td>
<td>33.73</td>
<td>5</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>0.118</td>
<td>10</td>
<td>27.78</td>
<td>12</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>0.107</td>
<td>15</td>
<td>28.57</td>
<td>11</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>0.097</td>
<td>18</td>
<td>30.00</td>
<td>10</td>
</tr>
<tr>
<td>A</td>
<td></td>
<td>0.110</td>
<td>12</td>
<td>12.00</td>
<td>18</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>0.107</td>
<td>16</td>
<td>17.67</td>
<td>17</td>
</tr>
<tr>
<td>A</td>
<td></td>
<td>0.101</td>
<td>17</td>
<td>17.65</td>
<td>16</td>
</tr>
</tbody>
</table>

Training Status Code: A, referred staff and at least one member of staff passed; B, did not refer staff; C, referred staff but none sat the exam.
Table 9 – Descriptive statistics for Duration (in hours)

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>18.167</td>
<td>16.500</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.833</td>
<td>0.383</td>
</tr>
<tr>
<td>Mean</td>
<td>7.066</td>
<td>5.689</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>3.392</td>
<td>2.804</td>
</tr>
<tr>
<td>Observations</td>
<td>447</td>
<td>230</td>
</tr>
</tbody>
</table>

Histogram of Session Duration

Figure 4 – Histogram of estimated drinking session duration, derived from the time of respondents’ first alcoholic drink and the time they were surveyed.
Figure 5 – Scatter plot of PBAL and session duration indicates a modest relationship such that PBAL is greater for those who have drunk longest. In this analysis, data was restricted to respondents providing a positive PBAL score.

### 4.1.6 Occupation

Respondents were asked to categorise their current employment status into one of three categories: unemployed, employed or student. Some respondents insisted that their employment status should be coded as ‘self-employed’ (n = 5), these data were recoded as employed.

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>76.89%</td>
<td>60.24%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>3.93%</td>
<td>5.64%</td>
</tr>
<tr>
<td>Student</td>
<td>19.18%</td>
<td>34.12%</td>
</tr>
</tbody>
</table>

### 4.1.7 Smoking

737 respondents indicated whether they smoked or not.

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoker</td>
<td>25.64%</td>
<td>22.63%</td>
</tr>
<tr>
<td>Non-smoker</td>
<td>74.36%</td>
<td>77.37%</td>
</tr>
</tbody>
</table>

No significant interaction on gender was noted (χ² = 1.04)

### 4.1.8 Residence

401 respondents whose primary place of residence was in the UK agreed to provide surveyors with a genuine UK postcode. From these postcodes geographical location could be derived as well as the distance from their usual place of residence to Cardiff city centre. Distance was calculated to Cardiff Central Train Station. Analyses demonstrate no significant difference in the
distance men and women live from the city centre (male mean = 31.73km, SD = 63.15; female mean = 26.00km, SD = 61.19; \( t < 1 \)).

Table 12 – Local/Unitary Authority of usual place of residence with more than one respondent in survey

<table>
<thead>
<tr>
<th>Local/Unitary Authority</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiff</td>
<td>53.89</td>
</tr>
<tr>
<td>Rhondda, Cynon, Taff</td>
<td>10.46</td>
</tr>
<tr>
<td>Caerphilly</td>
<td>9.38</td>
</tr>
<tr>
<td>The Vale of Glamorgan</td>
<td>9.12</td>
</tr>
<tr>
<td>Newport</td>
<td>2.68</td>
</tr>
<tr>
<td>Monmouthshire</td>
<td>2.14</td>
</tr>
<tr>
<td>Bridgend</td>
<td>1.88</td>
</tr>
<tr>
<td>Powys</td>
<td>1.61</td>
</tr>
<tr>
<td>Blaenau Gwent</td>
<td>1.61</td>
</tr>
<tr>
<td>Merthyr Tydfil</td>
<td>1.34</td>
</tr>
<tr>
<td>Torfaen</td>
<td>1.34</td>
</tr>
<tr>
<td>Flintshire</td>
<td>1.07</td>
</tr>
<tr>
<td>Carmarthenshire</td>
<td>1.07</td>
</tr>
<tr>
<td>Wandsworth</td>
<td>0.80</td>
</tr>
<tr>
<td>Bristol, city of</td>
<td>0.54</td>
</tr>
<tr>
<td>Swansea</td>
<td>0.54</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>0.54</td>
</tr>
</tbody>
</table>

The majority of respondents, 70.02%, lived within 20km of Cardiff Train Station and 56.02% lived within 10km.

Figure 6 – Histogram of distance (km) to usual place of residence. Derived from respondents’ postcode and measured to Cardiff Central train station for respondents living within 11km of the city centre.
4.1.9 Method for getting home

Respondents were asked how they intended to get to their place of residence following that evening’s session.

Table 13 – Method for getting home by gender

<table>
<thead>
<tr>
<th>Means</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive</td>
<td>3.67%</td>
<td>2.50%</td>
</tr>
<tr>
<td>Lift</td>
<td>11.33%</td>
<td>12.19%</td>
</tr>
<tr>
<td>Limo</td>
<td>0.00%</td>
<td>0.31%</td>
</tr>
<tr>
<td>Public Transport</td>
<td>2.67%</td>
<td>2.50%</td>
</tr>
<tr>
<td>Taxi</td>
<td>51.00%</td>
<td>63.75%</td>
</tr>
<tr>
<td>Walk</td>
<td>29.50%</td>
<td>17.19%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0.50%</td>
<td>0.63%</td>
</tr>
<tr>
<td>N/A</td>
<td>1.33%</td>
<td>0.94%</td>
</tr>
</tbody>
</table>

Proportion of respondents taking a taxi or walking home by distance to residence

Figure 7 – Proportion of respondents taking a taxi or walking home by distance to residence for those living within 10km of Cardiff Central train station

A multinomial logistic regression was used to determine how PBAL, gender and distance to respondents’ usual place of residence related to respondent’s choice of transport home for respondents living within 20km of Cardiff Central train station against the choice to use a Taxi (the most likely response over all).
Table 14 – Multinomial logistic regression to determine the relationship between chosen methods to get home, age, intoxication and gender

<table>
<thead>
<tr>
<th>Transport Category</th>
<th>β</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drive</td>
<td>Distance</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>-0.031</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>1.138</td>
</tr>
<tr>
<td></td>
<td>PBAL</td>
<td>-37.805</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>-0.615</td>
</tr>
<tr>
<td>Lift</td>
<td>Distance</td>
<td>0.053</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>0.007</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>0.016</td>
</tr>
<tr>
<td></td>
<td>PBAL</td>
<td>-9.452</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>-1.451</td>
</tr>
<tr>
<td>Public Transport</td>
<td>Distance</td>
<td>0.041</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>-0.127</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>PBAL</td>
<td>0.212</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>-1.844</td>
</tr>
<tr>
<td>Walk</td>
<td>Distance</td>
<td>-0.303</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>1.450</td>
</tr>
<tr>
<td></td>
<td>PBAL</td>
<td>-0.028</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>-0.300</td>
</tr>
</tbody>
</table>

Observations 253  
Pseudo R² 0.151  
Log Likelihood -216.276  
LR $\chi^2$(16) 76.81

* $p < 0.05$, ** $p < 0.01$  

Taxi is the base outcome

Results presented in Table 14 indicate that the greater a respondents PBAL the more likely they are to take a taxi rather than expect a lift home and the greater their PBAL the less likely they are to drive home. Respondents were more likely to take a taxi the further they live from Cardiff city centre and men were more likely to walk compared to women.

The choice to walk home, and how this varies with gender, is worth noting having controlled for PBAL and age. In Section 4.1.8 no significant difference in the distance to their usual place of residence was observed between men and women. Never-the-less women were less likely to walk and more likely to take a taxi. These differences might suggest women were more fearful and therefore opt for what they perceive as the safer option, an observation that may warrant further investigation.

In order to investigate the relationship between the decision to go home (respondents were asked where they were going next following their participation in the survey) and predictor variables that included time, intoxication and gender were regressed onto the binary outcome variable ‘going home’ using a maximum likelihood logistic regression model.
Table 15 – Predictors of the decision to go home

<table>
<thead>
<tr>
<th>Going Home</th>
<th>Odds Ratio</th>
<th>z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midnight - 1am</td>
<td>3.515</td>
<td>5.763**</td>
</tr>
<tr>
<td>1am - 2am</td>
<td>9.284</td>
<td>9.94 **</td>
</tr>
<tr>
<td>2am - 3am</td>
<td>21.378</td>
<td>11.73 **</td>
</tr>
<tr>
<td>PBAL</td>
<td>0.828</td>
<td>-0.16</td>
</tr>
<tr>
<td>Male</td>
<td>0.838</td>
<td>-1.08</td>
</tr>
<tr>
<td>Observations</td>
<td>893</td>
<td></td>
</tr>
</tbody>
</table>

Absolute value of z statistics in parentheses

* significant at 5%; ** significant at 1%

Results presented in Table 15 suggest no relationship between intoxication and the decision to go home, whereas the later in the evening it is the more likely they are to go home. Although it is plausible that people plan their consumption, aiming to reach a given level of intoxication before calling it a day, it is also possible that people drink until they can drink no more, either through fatigue or because licensed premises are no longer open. Although the data available in this survey cannot distinguish between different possible factors that influence the decision to go home, this might, together with the observation noted above that PBAL and session duration are related, warrant further attention given recent changes in licensing laws and therefore the availability of alcohol.

4.1.10 Percent blood alcohol level

893 respondents were breathalysed with 830 providing a score greater than 0. BA content was converted to percent blood alcohol level (PBAL). 31 women and 32 men provided zero PBAL scores.

Table 16 – Descriptive statistics for PBAL

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>0.331</td>
<td>0.267</td>
</tr>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>0.124</td>
<td>0.093</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.066</td>
<td>0.057</td>
</tr>
<tr>
<td>Observations</td>
<td>579</td>
<td>314</td>
</tr>
</tbody>
</table>

Men provided higher PBALs compared to women ($t = 7.17$, $p < 0.01$, two tailed) and one third of male drinkers and one fifth of female drinkers were more than twice the UK drink drive limit.
Figure 8 – The relationship between PBAL and expected behaviour (Greely & McDonald, 1992), showing the percentage of women and the percentage of men in each behavioural group.

Over 30% of those breathalysed provided either a zero or less than 0.08mg/mL PBAL score (the UK drink drive limit) with sobriety slightly more common earlier in the survey than later (see Figure 9). Perham et al.’s (2006) findings discussed above brings into doubt Greely and McDonald’s (1992) expected behaviour by intoxication framework used to construct Figure 8. In particular, very few of the respondents surveyed exhibited ‘severe impairment’ and surveyors noted no evidence that any of the respondents had vomited. This highlights Perham et al’s (2006) suggestion that there is a need to better understand the relationship between intoxication and observable behaviour. Never-the-less, nearly a third of respondents were below the UK drink drive limit suggesting that sobriety or near sobriety is quite common in Cardiff city centre.
Figure 9 – The relationship between hour of survey and expected behaviour for degree of intoxication. See text for further information.

4.1.11 Estimated units consumed

Respondents were asked to estimate when they started to drink and how many drinks they had consumed (which was converted to units of alcohol). 157 women (mean units = 7.70, SD = 7.54) and 335 men (mean units = 18.19, SD = 15.72) who also registered a PBAL level greater than zero responded. Consistent with the earlier observation that men were more intoxicated than women, men claimed to have consumed more units than women ($t = 7.94$, $p < 0.001$, two tailed). Referring to Figure 10, men drank more beer ($t = 9.99$, $p < 0.001$) whereas women drank more wine ($t = 5.69$, $p < 0.001$). Other comparisons were not significant following Bonferonni adjustment. Calculating estimated units per hour consumption rate from respondents estimated session start time, men drank more units per hour (mean = 3.72, SD = 2.16) compared to women (mean = 2.15, SD = 1.35; $t = 7.13$, $p < 0.001$).
Average number of units consumed by beverage type and gender

![Average number of units consumed by beverage type and gender](image)

Figure 10 – The average number of units consumed by gender with standard error error bars of the mean.

These data indicate that men drink more beer, drink faster and drink for longer compared to women. A study that compared drinking rates and intoxication against different strengths of beer might highlight factors promoting alcohol misuse in men, the gender most susceptible to misuse in this survey. Specifically, what drives the choice of alcoholic beverage and to what extent does that beverage’s alcohol content affect choice? It might be found that lower alcohol beers do not overly affect the rate or duration of consumption, in which case strategies to reduce the alcohol content of beer might have positive effects on misuse. If it was found that men drink pints and that alcohol concentration was a lesser concern this may be evidence in favour of reducing the alcohol concentration of beer.

4.1.12 Happiness

Respondents were asked to rate their level of happiness on a scale of one to ten, with ten being the most happy they had ever been.

Table 17 – Descriptive statistics for happiness

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Mean</td>
<td>6.765</td>
<td>7.019</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>2.112</td>
<td>2.168</td>
</tr>
<tr>
<td>Observations</td>
<td>586</td>
<td>321</td>
</tr>
</tbody>
</table>
Overall, the great majority of respondents were happy, polite and interested in the survey. Further analyses of the happiness data (Moore, Shepherd, Perham & Cusens, 2006) suggest a non-linear relationship between intoxication and happiness. Previous laboratory research had suggested that a low to moderate dose of alcohol increases happiness relative to sobriety and heavy intoxication (Ekman, Frankenhaeuser, Goldberg, Hagdahl & Myrsten, 1964; Baum-Baiker, 1985). Thus, analyses were conducted to formally test this hypothesis in the context of the LB survey.

Data from participants who responded to the happiness question and provided an alcometer reading greater than zero (168 women and 318 men) was analysed. Control variables included smoking status, age, gender, occupation and ethnicity. Drinkers’ happiness varied according to blood ethanol concentration and peaked around the UK drink drive limit for women and about three times this level for men. These findings suggest a new approach to promoting sensible drinking based on the positive but diminishing and ultimately negative effects of alcohol on happiness.

Much of the advice given to at-risk drinkers highlights the negative consequences of consumption (e.g., Anderson, 1996) for example the risks of liver cirrhosis, cancer, injury and violence (Naimi et al., 2003). However, evidence suggests that individuals differ in decision making abilities and risk taking behaviour, possibly because of individual differences in reward and punishment sensitivity: clearly some individuals are more motivated to avoid punishment and therefore behave more cautiously whereas others are more focused on achieving rewards at the cost of ignoring the negative consequences of their actions (c.f. Gray, 1987). Moreover, Kambouropoulos and Staiger (2001) examined reward-punishment sensitivities in light and heavy drinkers and showed that heavy drinkers showed greater relative sensitivity to rewards and diminished sensitivity to punishment. Thus, public health messages specifying the negative consequences of alcohol consumption may have less effect on reducing heavy drinkers’ consumption levels relative to light drinkers. A more balanced approach is to emphasise the positive consequences of consumption (optimising happiness
relative to expenditure) in a way which reduces abuse. These happiness findings are also relevant in the context of social research which has found that campaigns designed to reduce alcohol misuse which emphasise negative social consequences are more likely to be effective than campaigns that emphasise negative health outcomes (Andreasen, 1995; Peele & Grant, 1999).

4.1.13 Subjective Assessments

There were two reasons surveyors reported subjective assessments. First, they were able to quantify the following:

- Obvious signs of drunkenness (e.g., individuals staggering)
- Verbal abuse, including shouting and swearing (recorded by surveyors throughout the session and time of incident)
- Evidence of disorder in groups waiting for transport; recorded by surveyors throughout the session and time of incident
- Intrusive music from licensed premises; recorded by surveyors throughout the session
- Evidence of public urination; recorded hourly by surveyors throughout the session
- Evidence of public vomiting; recorded hourly by surveyors throughout the session
- Visual and auditory evidence of breaking glass; recorded by surveyors throughout the session
- Visible signs of violence; recorded by surveyors throughout the session
- Rubbish on the Street

Second, subjective assessments added additional behavioural information to the alcometer readings and information provided by respondents. In particular, respondents’ reaction to the surveyors, for example, whether they were polite, and their demeanor, for example, whether they looked and behaved as if they were drunk. Because different surveyors assessed respondents on the same scales inter-rater reliability was tested through two surveyors rating the same subset of respondents on the same scales. The data and analyses reported below are presented with these measures of inter-rater reliability. Inter-rater reliability is important as it checks that the measure used to assess subjective aspects of drunkenness produce similar results irrespective of who used that measure.

The subjective ratings further allowed potential sample bias effects to be tested. Because both respondents and non-respondent were rated on the same scales comparisons could be made between respondents and non-respondents. Although no precedent exists for the type of research reported here it was felt that the probability of a response may decrease as intoxication increased. If found then some correction for such a sampling bias could at least be made explicit in the data and facilitate statistical techniques that might correct for such biases. As will be reported, however, we found that it was the more sober who were least likely to respond. This is discussed further below.

Observer rated drunkenness

Table 18 – Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Mean</td>
<td>4.700</td>
<td>4.581</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>2.237</td>
<td>2.046</td>
</tr>
<tr>
<td>Observations</td>
<td>474</td>
<td>267</td>
</tr>
</tbody>
</table>
Observer-rated drunkenness for respondents and non-respondents

Figure 12 – Observer rated drunkenness for respondents and non-respondents suggests non-responders were more sober.

Inter-rater reliability was assessed using Spearman’s ρ to test the hypothesis that surveyors’ ratings were independent ($P = 0.552$, $p < 0.001$) and this analysis suggested strong agreement between surveyors and that the scale provided a consistent measure of observable drunkenness. Spearman’s ρ also yielded a significant association between observer rated drunkenness and PBAL ($P = 0.532$, $p < 0.001$) suggesting that different observers ratings agreed and that this measure predicted PBAL and therefore provides an approximate measure of non-responders levels of intoxication.

Non-respondents (mean = 4.77, SD = 2.26) were judged more sober than respondents (mean = 5.27, SD = 0.08; $t = 3.32$, $p < 0.001$). This amounts to a potential sampling bias in the survey in that sober people tend not to respond to surveyors with clipboards. This is important as it suggests that the estimations on the prevalence of alcohol misuse may be over estimated.

**Walk**

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>65.91%</td>
<td>75.36%</td>
</tr>
<tr>
<td>Staggering</td>
<td>30.88%</td>
<td>23.46%</td>
</tr>
<tr>
<td>Severely impaired</td>
<td>3.21%</td>
<td>1.18%</td>
</tr>
</tbody>
</table>

Kappa statistics:

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Expected agreement</th>
<th>Kappa</th>
<th>Standard error</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>76.74%</td>
<td>56.61%</td>
<td>0.464</td>
<td>0.040</td>
<td>11.72**</td>
</tr>
</tbody>
</table>

** significant at 1%
Response

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive</td>
<td>0.53%</td>
<td>0.93%</td>
</tr>
<tr>
<td>Evasive</td>
<td>6.08%</td>
<td>5.61%</td>
</tr>
<tr>
<td>Impolite</td>
<td>2.25%</td>
<td>2.10%</td>
</tr>
<tr>
<td>Joker</td>
<td>17.33%</td>
<td>6.07%</td>
</tr>
<tr>
<td>None</td>
<td>1.98%</td>
<td>1.40%</td>
</tr>
<tr>
<td>Polite</td>
<td>71.83%</td>
<td>83.88%</td>
</tr>
</tbody>
</table>

Kappa statistics:

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Expected agreement</th>
<th>Kappa</th>
<th>Standard error</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>74.66%</td>
<td>64.65%</td>
<td>0.283</td>
<td>0.037</td>
<td>7.72**</td>
</tr>
</tbody>
</table>

** significant at 1%

Eyes

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>41.94%</td>
<td>56.71%</td>
</tr>
<tr>
<td>Glazed</td>
<td>53.66%</td>
<td>38.82%</td>
</tr>
<tr>
<td>Unknown</td>
<td>4.42%</td>
<td>4.47%</td>
</tr>
</tbody>
</table>

Kappa statistics:

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Expected agreement</th>
<th>Kappa</th>
<th>Standard error</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>72.35%</td>
<td>49.23%</td>
<td>0.456</td>
<td>0.040</td>
<td>11.29**</td>
</tr>
</tbody>
</table>

** significant at 1%

Speech

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>52.95%</td>
<td>69.83%</td>
</tr>
<tr>
<td>Incoherent</td>
<td>2.28%</td>
<td>0.95%</td>
</tr>
<tr>
<td>N/A</td>
<td>3.75%</td>
<td>4.51%</td>
</tr>
<tr>
<td>Slurred</td>
<td>41.02%</td>
<td>24.70%</td>
</tr>
</tbody>
</table>

Kappa statistics (with response 'N/A' dropped):

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Expected agreement</th>
<th>Kappa</th>
<th>Standard error</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>71.45%</td>
<td>49.67%</td>
<td>0.433</td>
<td>0.039</td>
<td>11.22**</td>
</tr>
</tbody>
</table>

** significant at 1%

The above analyses show that subjective drunkenness ratings agree across surveyors and further highlight that over 70% of respondents were polite with only a small minority (< 1%) responding aggressively. These data agree with surveyors impressions of Cardiff city centre. Broadly speaking, those who appear most drunk, or who are aggressive, are in the minority with the vast majority of respondents acting responsibly and enjoying their time in the city centre.

4.2 Analyses

4.2.1 Predicting PBAL

Not all potential respondents who were approached by surveyors agreed to participate. It is plausible that the non-responding group constitutes a sub-group
in the population that may differ from those surveyed (e.g., more drunken individuals may be less likely to respond). In order to correct for potential sampling biases the following analysis uses a Heckman selection procedure. This analysis adjusts for sampling biases (see above). Subjective ratings of drunkenness indicated respondents were likely to be judged drunker relative to non-responders. Therefore, generalising from our sample to the population of Cardiff city centre on a Friday or Saturday night is problematic (we only have data on a sub-population). The Heckman corrects for potential sampling biases and provides more realistic estimates.

Referring to section 4.1.13 above (p32) subjective ratings of drunkenness on a ten-point Likert scale showed both good inter-rater reliability and was available for the majority of those approached. A Heckman Selection model was therefore specified to assess the relationship between intoxication and potential predictors that included observer-rated drunkenness (censored observations, N = 278; observations N = 674 where PBAL > 0). Standard errors were further adjusted by clustering on the survey location (see Figure 1 for survey locations; Moulton, 1990).

Table 19 – Regression of predictor variables on PBAL using a two-stage Heckman selection model clustered on the three survey locations

<table>
<thead>
<tr>
<th>PBAL</th>
<th>β</th>
<th>Robust SE</th>
<th>z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.004</td>
<td>0.001</td>
<td>4.06  ***</td>
</tr>
<tr>
<td>Age²</td>
<td>-6.41E-05</td>
<td>1.84E-05</td>
<td>-3.48  ***</td>
</tr>
<tr>
<td>Male</td>
<td>0.024</td>
<td>0.007</td>
<td>3.17  **</td>
</tr>
<tr>
<td>Smoker</td>
<td>0.002</td>
<td>0.003</td>
<td>0.66</td>
</tr>
<tr>
<td>Student</td>
<td>-0.016</td>
<td>0.008</td>
<td>-2.03  *</td>
</tr>
<tr>
<td>Unemployed</td>
<td>0.012</td>
<td>0.016</td>
<td>0.78</td>
</tr>
<tr>
<td>Saturday</td>
<td>-0.020</td>
<td>0.006</td>
<td>-3.13  **</td>
</tr>
<tr>
<td>Midnight - 1am</td>
<td>-4.69E-04</td>
<td>0.003</td>
<td>-0.14</td>
</tr>
<tr>
<td>1am - 2am</td>
<td>-0.015</td>
<td>0.002</td>
<td>-6.82  ***</td>
</tr>
<tr>
<td>2am - 3am</td>
<td>-0.006</td>
<td>0.004</td>
<td>-1.83</td>
</tr>
<tr>
<td>Drugs</td>
<td>0.021</td>
<td>0.003</td>
<td>6.74   ***</td>
</tr>
<tr>
<td>Alcometer ‘a’</td>
<td>0.012</td>
<td>0.005</td>
<td>2.55  **</td>
</tr>
<tr>
<td>Constant</td>
<td>0.097</td>
<td>0.026</td>
<td>3.67   ***</td>
</tr>
</tbody>
</table>

Selection model

| Subjective drunkenness | 0.187   | 0.026   | 7.19   *** |
| Constant              | -0.785  | 0.457   | -1.72  |

Wald test of independent equations (ρ = 0): χ²(1) = 109.83***

Standard errors are clustered on three locations

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 16 presents output from a regression of predictor variables onto PBAL with control variables. These data help to recognise those most at risk of intoxication. A non-linear relationship between age and PBAL is observed (see Figure 13) such that those estimated to be most intoxicated are 31 years old. Men were more intoxicated than women and students were less intoxicated than the employed, although there is no significant difference between the unemployed and the employed. Generally, people are less intoxicated on Saturday compared to Friday and, compared to the period 11pm to midnight those surveyed between 1 and 2am were most sober. Those admitting to have taken prohibited drugs were more drunk than those who had not. Two alcometers were used in the survey and results indicate a significant difference in the readings these two machines
provided. Readings varied by 1.2% which is within acceptable limits for a screening instrument and does not pose a problem in the interpretation of PBAL data.

![Age and PBAL](image)

Figure 13 – The estimated relationship between age and PBAL

These data suggest that those most at risk of heavy alcohol consumption are a male, in their early 30s, non-student and drinking on a Friday evening. These data might be used to inform targeted interventions and, together with the earlier observation that most drinkers are from within a 20km radius of Cardiff, suggests targeted interventions might focus on the local area.

4.3 Subjective Observations

4.3.1 Litter

Commercial litter (i.e., litter from local restaurants, shops and licensed premises) was apparent in most locations although it was most prominent in St Mary Street. On the whole this was stacked responsibly in or by industrial waste bins. However, clientele in the NTE still regarded these piles as acceptable targets to be abused and were occasionally observed to kick the litter. The other main source of commercial litter was from flyers handed out by employees of local pubs and clubs.

Glass was in evidence across all three locations, mostly glass bottles. However, individuals were also seen with partially full pint glasses indicating that Door Security Staff (DSS) might be more vigilant with regards clients’ possessions as they exit premises. There was a noticeable increase in the number of plastic bottles on St Mary Street towards Christmas. This is probably due to a large club in the area switching to plastic bottles.
Of note, CCSP issued a limited number of glass collection bins to large pubs and clubs in November and December 2005 based upon the recommendations of the LB project team.

4.3.2 Aggression and violence

The majority of violent incidents appeared to occur on the periphery of pedestrianised zones.

Young aggressive males were characterised by their desire to remove their shirts, irrespective of weather conditions, circle one another, display aggressive gestures, what one surveyor described as ‘chest thumping’ and issue aggressive vocalisations (or “pan hoots”; Wilson, Hauser, & Wrangham, 2001).

Boisterous vocalisations, whether aggressive or not, tended to attract the attention of surveyors and clients and tended to give the environment an aggressive feel.

Although the level of observed violence was rare, several such incidents did occur. One notable occasion involved four males walking south along St Mary Street. One male was noticeably shorter than the other three, appeared to be intoxicated, whereas the others showed no signs of intoxication, and was ‘bothering’ the other three. As they neared the end of St Mary Street an incident occurred halfway up St Mary Street that involved the police. One of the taller males was seen to scan the environment and look skywards (possibly to see where the CCTV cameras were pointing) he then hit the shorter male in the face with considerable force. The shorter male was knocked unconscious and remained on the floor until an ambulance arrived. The police were alerted and a nearby witness joined police constables (PCs) in a police car.

Overall, violence was observed rarely, more frequently ‘boisterousness’ and ‘wrestling’ were seen and occasionally Door Security Staff ‘manhandled’ a customer out of licensed premises.

4.3.3 The Police

On the whole, the police were observed to act in a highly professional manner. This is particularly marked given the extreme levels of provocation witnessed by surveyors. On one occasion, for example, a drunk young male in St Mary Street was observed to approach a police van containing an estimated seven PCs and proceeded to gesticulate and shout abuse. After several minutes he was approached whereby he physically responded. He was then placed in the police van and taken away. There were numerous occasions like this where officers responded calmly managing the situation with professionalism.

Some dissonance in clients’ perceptions of the police was noted. On the one hand, some clients were clearly reassured by the presence of the police whereas others were keen to stress their view that violence in the town centre was caused by the police. Although surveyors made no observation that supports this latter position, it may arise through a lack of understanding on what the police have to deal with. Often, incidents become most visible when the police, wearing fluorescent overcoats, become involved and this was usually when an incident had already begun. When witnessing the police involvement in an incident, one would see a number of officers physically restraining perhaps one male. With this limited information some observers might regard the police’s behaviour as ‘heavy handed’. However, the interpretation may be markedly different if observers had
seen the entire event as it unfolds over time. The ‘heavy handed’ conclusion would probably be reinterpreted as ‘fully justified’ if observers were aware that officers were restraining a highly charged and physically aggressive male who poses a definite risk of causing injury to others.

The presence of the police also changes the environment in another important way. Their presence both reassures clients of the NTE and their early intervention also prevents disorder escalating. Indeed, this feature of police presence means that clients can become involved in aggressive events with some assurance that the police will deal with this event professionally and prevent, where possible, harm. In effect, this changes the consequences of aggression such that the anticipated harm is lessened. In effect, it might be the case that the presence of the police increases the frequency but reduces the intensity (severity of injury) of aggression.

4.3.4 Disorder

Street litter increased through the night, remarkable given the availability of empty litter bins. On most evenings and in most locations empty litter bins were available, although their placement was sometimes noted as unusual. For example, on Wood Street and Greyfriars Road, bins would be on the opposite side of the street to the pubs and clubs and therefore the majority of clients. Generally, we observed a relaxed attitude to littering in Cardiff with clients feeling able to drop whatever litter they had where and when they felt the need to.

Male urination was observed throughout the duration of the surveys. Surveyors were stationed in well lit populated areas where one would not expect to see urination. Despite this, surveyors observed male clients urinating through letter boxes, onto shop windows, and into the street in full view of anyone who cared to look. Given the total lack of public conveniences some degree of urination might be expected. However this is tempered by a lack of females urinating in public. Unless there are gross physiological differences between men and women it would seem male urination addresses a need that could be delayed to a more appropriate time and place, as female clients appear to manage.

An attempt to tackle male public urination was made by Cardiff Community Safety Partnership who stationed portable urinals, or pisoires, around the city centre.

4.3.5 Door security staff

Observation of DSS in the context of this study is hampered through researchers not entering licensed premises. Thus, the only visible signs of their behaviour were at the point where a client was ejected. Most of their activity was focused on events in the establishments where they worked. Never-the-less, while DSS appeared restrained most of the time there were instances where excessive force was used. Moreover, this restraint may be partly due to the presence of surveyors in that location. Instances of excessive force mostly involved the physical ejection of clients onto the street, taking the problem from inside licensed premises, and therefore the responsibility of the licensee, onto the street and the responsibility of the police. Indeed, coupled with the excessive levels of glass taken from licensed premises onto the street and litter resulting from flyers (see above) it would appear licensed establishments have little regard for the outside environment and attend only to the needs of their clients. This is despite their clients contributing to disorder in the NTE.
On one occasion DSS in a large nightclub along St Mary Street ejected what appeared to be the perpetrators of an aggressive incident. They were standing outside the club for a few seconds until the DSS ejected what appeared to be the victim of the incident. The DSS did not attempt to de-escalate the situation and the victim was hit in the face by the perpetrators. DSS showed only cursory interest in proceedings leaving the police to deal with the incident.

One notable incident highlighting the potential impact of surveyors on DSS behaviour occurred in Greyfriars Road. A male was observed exiting a nearby nightclub with his female partner. Several seconds later DSS exited and chased him, eventually catching him and pinning him to the ground. The male was restrained until the police arrived. DSS looked towards surveyors and clearly registered our interest in this event. Although physically restrained, the male was treated with some degree of respect and came to no harm. It is impossible to know if this event would have unfolded in the same way had surveyors not been present, but our impression was that, as this male had physically assaulted a female member of staff in the nightclub, DSS may have restrained themselves because of our presence. However, the same DSS were observed to take care of the immediate environment, collecting glass off the street and refusing entry to clearly inebriated individuals and overall presented us with the impression of responsibility and professionalism.

A further incident occurred in December 2005. A male was seen emerging from a bar along St Mary Street with a DSS in a headlock. Two DSS intervened and the male was eventually pushed to the ground. Surveyors close to the scene reported that, prior to his release, the DSS effectively ‘ground’ the males head into the ground whereby he sustained a head injury. However, the male did not attempt to retaliate, instead wandering off only to reappear an hour or so later trying to gain entry into another club.

4.3.6 Atmosphere and general feelings

Novice surveyors would usually describe their feelings as ‘apprehensive’ before starting their first survey evening, but having completed several surveys surveyors would usually find the experience enjoyable; with the main detractor becoming inclement weather. Indeed, some surveyors appeared to enjoy their time on the project.

On most evenings the atmosphere was very positive, although this tended to decline as the evenings wore on. This might be due to changes in clients’ behaviour but may also be due to fatigue in surveyors. Features of the environment where surveyors openly expressed unease usually involved large crowds, rain; such feelings were heightened towards the end of the evening when clients exited premises. Of note is the effect of boisterous behaviour such as a group of males play fighting: boisterous behaviour would elicit feeling of unease in novice surveyors. However, more experienced surveyors, whether that experience was gained directly through the survey or through having worked or socialised in a city centre environment, reacted less to such events.

The atmosphere changed markedly on one occasion where the police chased a male from the direction of the Cardiff Central train station and then up St Mary Street. The survey was being assisted by a plain-clothed male PC. The male ran past where the survey was being conducted at which point the plain-clothed PC tackled him to the ground. This clearly surprised the male and also the PCs in close pursuit as it resulted in four or five PCs, the plain-clothed officer and the male protagonist colliding in quick succession and stumbling to the floor. An immediate change in the atmosphere was noted and clients observing this incident generally appeared to become more antagonistic, particularly towards
the police. To control the situation, some PCs used the threat of arrest as a means of crowd dispersal which appeared to further antagonise some clients.

Another notable occasion was where Wales played Ireland in the Six Nations Rugby Tournament. The atmosphere across both the evening before and after the match was very positive. At 2am on the Friday before the match someone found a rugby ball and an impromptu rugby match ensued. This did result in a considerable number of fans rolling on the floor amongst broken glass, litter, urine and vomit. Because of the clear risk to players’ well-being a police officer took it upon himself to confiscate the ball. When the moment came, he grabbed the ball and held it close to his chest. The crowd showed considerable restraint and the situation remained good humoured.

Overall, most respondents showed genuine interest in the survey, felt it was a worthwhile endeavour and acted politely. Some respondents were concerned that they might be arrested but when reassured that the survey was conducted by CCSP became more open and willing to participate. Handing out lollipops had a very positive effect, and was often used by surveyors as a recruitment technique with some degree of success, “if you do the survey I’ll give you a lollipop”. Adverse reactions to the survey were rare.

4.3.7 Methodology

The surveyors suffered in the cold and the motivation to survey was significantly dampened. While it appears unlikely this had an effect of the quality of data acquired, it should be noted that this will require attention should surveys of this nature be repeated; particularly where underdressed respondents are asked to stand around answering questions in temperatures that approached -6°C, as happened on several occasions during the survey. Indeed this may also underlie the sampling bias where the less sober were more likely to respond.

We observed an effect of time on respondent recruitment. It appeared that respondents were motivated to get to their chosen destination earlier in the evening. Whereas later, once satiated, they were more willing to hang around and chat. Indeed, some people appeared particularly friendly and chatty towards the end of the evening.

The repeated cross-sectional design worked well to provide a picture of Cardiff city centre. However, there is a marked bias towards premises in the vicinity of the survey with very few respondents claiming they came from, for example, the Students Union, the largest licensed premise in Wales. For this reason inferring one premise miss-sells alcohol to a greater extent than another must be tempered. The investigators were aware of this potential pitfall from the pilot data and thus elected to survey three locations across town, feasible given available resources. While this did help, a more thorough approach might be to have more surveyors surveying across a larger number of locations bimonthly.

4.3.8 Underage drinking

Only fifteen respondents indicated they were less than eighteen years of age. While this might indicate few underage drinkers are present in the NTE, this assumption carries the caveat that underage drinkers may be proficient in providing a false date of birth data or that they sought to avoid the survey. While it is plausible that the low number of underage drinkers is due to a sampling bias, we feel that the likely cause of recording few underage drinkers is that there are few in the environment surveyed. This is plausible given that the price of alcohol is markedly higher in the city centre compared with other outlets, such as off-
licences and premises peripheral to the city centre; as income and age tend to be positively associated it is unlikely many underage drinkers would prefer to spend scarce resources in pricey licensed premises.

4.4 Community awareness

The LB Project was a component of related initiatives tackling alcohol-related disorder in the city centre (see Appendix 6.1 for a comprehensive list) and, while it was important to communicate the project’s goals to the community, there was a need to present a broader picture on how disorder was being addressed and the successes CCSP had achieved. In particular, surveys of Cardiff residents indicated that violence and city centre disorder were important areas of concern. The positive media achieved by this project helped CCSP goals by publicising strategies that tackle violence and city centre disorder and communicating a more balanced picture of the city centre. Furthermore, some evidence suggests that the way in which behaviour is labelled can affect that behaviour’s prevalence. For example, if an area is labelled in the media as the ‘binge drinking capital of the UK’ then drinkers interested in binge-drinking may be attracted to that area and the media label becomes a self-fulfilling prophesy (see Kotler & Zaltman, 1971). As the LB project dealt with an issue which was receiving considerable media interest and also, due to the nature of the study, had the potential to attract attention in its own right a communications consultant joined the team to oversee this aspect of the project. Having a team member dedicated to this side of the project insured key stakeholders within the Cardiff Community Safety Partnership as well as the media were briefed appropriately. In consequence of this addition, positive media (see Appendices 6.5 and 6.6 for examples) coverage was achieved, including articles in

- BBC Wales Today (regional nightly TV news magazine programme)
- BBC Radio Wales
- BBC Wales Online (web-based news)
- BBC Wales 'Social Action' Campaign 2005 - binge drinking
- ITV Wales News
- South Wales Echo
- Western Mail
- Crime Reduction Digest (Home Office publication)
- Community Safety Wales (Welsh Assembly Government / Home Office publication)
- Red Dragon FM (local commercial radio station)
- Real Radio
- Vibe FM

Team members also communicated project findings to two CCSP meetings in Cardiff and one Safety Partnership meeting in Swansea.

4.5 Responsible Beverage Server (RBS) training

Before rolling out the BIIAB server training programme, the Chair of the Licensee’s Forum was approached and asked for advice on how best to involve licensees. He emailed his response on 12 June 2005:

"I would like the following point raised in the meeting [LB Team Meeting] and the point below is the strategy that I hinted at earlier.

"To ensure the maximum uptake of the server training is going to be hard as all the information and strategies from the Government / Police and other interested parties has been to target the licensees. This has
lead to a feeling of disengagement from local initiatives as the licensees don’t see the point. This is a major hurdle and the way to get around this is to make the server training a plus for the licensees.

“In my opinion if you were to have meetings with the police management Chief inspector and above and involve the licensing department and get agreement, that if there are operations in the future for underage / drunkenness and the venue/bar they visit had all their staff on or has completed server training, that this forms the basis of due diligence in the eyes of the law. I cannot stress how important this is as this will form the main motivating factor for the licensees.

“The police approach will be one that has to take each individual case on its merits, however if they accept that the server training is a basis of due diligence we will be able to ‘sell’ this to the licensees very well.

“I hope that this is helpful to you and if we can move this forward, I don’t mind having meetings with the police and yourself to put this case forward. It may be beneficial for us to meet with the police management together to show a genuine partnership approach.

“If we get agreement with the police then we can present this to the licensee’s forum in July.”

Server training was initiated at the Licensees Forum, a meeting attended by licensees and bar managers from Cardiff city centre in June 2005. At this meeting the LB project manager introduced the research and described the server training programme. Bar staff were recruited, trained and given a short telephone exam up to the end of October 2005. Some licensees enthusiastically joined the scheme, others indicated that they would participate but, due to a clear lack of leadership and organisation on their part, were unable to meet the schemes deadline, and others refused stating that they already provided adequate training for their staff.

Table 20 – Number of bar staff trained on the server-training course by premise (names of premises are removed from this version of the report).

<table>
<thead>
<tr>
<th>Licensed Premise</th>
<th>Approximate number of bar staff</th>
<th>Number of bar staff referred</th>
<th>% bar staff referred</th>
<th>Number referrals passed (BIIAB)</th>
<th>% referrals passing exam</th>
<th>% bar staff RBS trained</th>
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<td>Licensed Premise</td>
<td>Approximate number of bar staff</td>
<td>Number of bar staff referred</td>
<td>% bar staff referred</td>
<td>Number referrals passed (BIIAB)</td>
<td>% referrals passing exam</td>
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<td><strong>160</strong></td>
<td><strong>79</strong></td>
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<td><strong>Average</strong></td>
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<td><strong>7.27</strong></td>
<td><strong>37.77</strong></td>
<td><strong>3.59</strong></td>
<td><strong>53.09</strong></td>
<td><strong>21.59</strong></td>
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</table>

Of the 22 premises that referred bar staff for the RBS training, 5 were unable to encourage at least one member of bar staff to sit and pass the exam. Given that there was only one exam failure (although this person subsequently retook the exam and passed it), we can assume that none of these 5 premises actually had any of their bar staff sit the exam at all. Thus, in total, 79 of the 160 referred bar staff passed the exam, which is just less than 50%.

Five premises managed to get all their referred bar staff to sit and pass the exam. Of the approximate 485 bar staff who worked in the premises that referred bar staff for the RBS training, 22% passed the RBS exam. Given that there are approximately 900 bar staff in Cardiff city centre, around 9% were therefore RBS trained.

### 4.5.1 Test purchasing scheme

SWP ran a test purchasing scheme in early 2005 and found that some premises were willing to sell alcohol to an under 18 year old police confederate. The scheme was repeated in December 2005 revealing that 12 out of 40 (30%) premises failed. Roughly equivalent proportions of non-RBS and RBS trained premises failed: 29.63% (8 out of 27) non-RBS trained compared with 30.77% (4 out of 13) RBS trained premises.
4.5.2 Interviews with bar staff in Cardiff’s Night Time Economy (NTE)

In December 2005 we interviewed a number of bar staff who worked in licensed premises in Cardiff city centre to better understand the impact of the server training scheme, to obtain their thoughts about the RBS training and other training they had undergone as part of their job and their experiences of specific bar-related situations over the previous years.

The interview comprised two sides of paper and took around 15 minutes to complete. Due to the busy nature of bar work, especially leading up to the Christmas period, only 23 bar staff were interviewed, 6 of whom had taken the RBS exam and 17 who had not, see Table 21.

Table 21 – Number of bar staff interviewed who had taken the RBS exam (names of premises are removed from this version of the report).

<table>
<thead>
<tr>
<th>Licensed premise</th>
<th>Referred staff for RBS training?</th>
<th>Number of staff interviewed</th>
<th>Number of staff interviewed who took RBS exam</th>
<th>Number of staff interviewed who did not take RBS exam</th>
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The first part of the interview asked bar staff for some demographic information, such as their date of birth and birthplace, as well as general information about their length of duration in the licensing trade.

In the second section, bar staff were asked questions regarding three specific instances that are known to occur in the course of bar work: refusing to serve alcohol to customers who had had too much to drink, refusing to serve alcohol to customers who were too young to be served alcohol and being verbally or physically threatened by a customer. For each question, details were obtained regarding the last time the situation occurred (time of day, pub/club atmosphere and customer reaction), how safe the respondent felt and the frequency of these occurrences in their current and previous bar work.

The third section focused on the training, including RBS training, which they had undertaken during the course of their work. All bar staff were asked about training concerning licensing laws and the opportunity to receive further training and they were also asked to rate their confidence in their knowledge and ability. Those who had taken the RBS exam were asked whether there were any differences between it and other training they had received as well as their overall thoughts regarding the exam.

In the final section, bar staff were presented with four scenarios and asked what they would do if they were confronted with each one. The scenarios were taken from the handbook for the RBS exam. Specifically, the scenarios were as follows:
• How would you deal with a customer you believed was younger than 18 years of age?
• How would you deal with a customer buying a drink for a friend who was showing signs of glazed eyes and incoherent speech?
• Can you name any ways that may help to prevent trouble before it occurs?
• How might you explain the difference in two friends’ drunken behaviour given that they have both drunk the same drinks all evening?

Due to the small and unequal sample size, no statistical analyses were performed and only descriptive statistics are reported.

**Demographic information**

Of the 23 respondents, only 3 were born in Cardiff. Fourteen females were interviewed, in comparison with nine males, and the average age of all respondents was 22.48 years (22.43 for females and 22.56 for males). The youngest respondent was 18 years of age and oldest was 27 years of age.

**Length of employment in licensed premises**

Respondents had worked in their current licensed premise for an average of 14 months (range of 1-40) and had worked in previous licensed premises for an average of 37 months (range of 1-90).

**Refusal of customers who were deemed too drunk to be served more alcohol**

All respondents had refused to serve alcohol to a customer who they thought had had too much to drink. On average, the most recent incident occurred 13 days prior to the interview taking place. Most respondents, 12 out of 23, had experienced this situation in the previous 2 to 14 days. On most occasions, the incident occurred after 8 pm (17 out of 23). In general, the customers who were refused further service moaned, sometimes argued but then walked away peacefully. On occasions, senior members of bar staff or door staff, were called upon to escort the customer out of the premises. Respondents, on average, rated their safety during the occasion as 8.4 out of 10. The average frequency of these occurrences in the current job was 36 (range of 0-150) whereas in the previous job it was 33 (range of 0-100). Thus, for all bar staff, on 12% of days in their current job, they had refused service to a customer who they deemed had had too much to drink. In contrast, this only happened on around 4% of days in their previous bar jobs.

**Refusal of customers who were unable to provide appropriate identification**

All respondents except one (possibly as they had only been working in licensed premises for one month) had refused service to a customer who they thought was too young to be served alcohol. The most recent occasion, on average, was 20 days prior to the interview, with the majority of occasions occurring in previous 2 to 14 days (13 out of 22). On most occasions the incident occurred before 7 pm (15 out 22). Customers who were refused service for not being able to produce appropriate identification, such as a passport, driving license or proof of age card, moaned or sulked, sometimes argued but then walked out of the premises peacefully. Bar staff rated their safety in this situation, on average, as
9.4 out 10. In their current job, bar staff had encountered this situation, on average, 41 times (range of 0-200), whereas in their previous job it was 49 times (range of 2-150). Thus, for all bar staff, on 17% of days in their current job, they had refused service to a customer who they deemed was too young to be served alcohol and had not produced appropriate identification. In contrast, this only happened on around 6% of days in their previous bar jobs.

**Experiencing verbal or physical threat by a customer**

Sixteen of the 23 respondents had experienced a customer verbally or physically threatening them. On average, the last occasion occurred 105 days prior to the interview with most occasions occurring at least one month before the interview (9 out of 16). Most incidents occurred after 8 pm (11 out 16) and door staff were called upon to help with the situation (10 out 16). Safety, on average, was rated at 5.8 out of 10. In their current job, respondents, on average, experienced verbal or physical threat 21 times (range of 0-200) whereas in the previous job it was 18 times (range of 0-170). Thus, for all bar staff, on 5% of days in their current job, they were verbally or physically threatened by a customer. In contrast, this only happened on around 2% of days in their previous bar jobs.

However, the frequency of occurrence given by one respondent was particularly high compared to the next highest, namely 200 and 50 respectively. When this was datum was removed, the descriptive statistics changed. Thus, in their current job, respondents, on average, experienced verbal or physical threat 9 times (range of 0-50) whereas in the previous job it was 6 times (range of 0-10). Thus, for all bar staff, on 1.8% of days in their current job, they were verbally or physically threatened by a customer. In contrast, this only happened on less than 0.5% of days in their previous bar jobs. Respondents were also asked if they had been assaulted during the course of their current job and only 3 said that they had.

**Training received during licensed premise employment**

All staff gave examples of some training, such as licensing laws, food, alcohol-related issues, health and safety, underage drinking and conflict management, which they had undertaken as part of their current job. Ten respondents felt that they would benefit with further training on such alcohol-related issues as management, dealing with awkward customers and conflict management.

Of those six respondents who had taken the RBS exam, only three felt that there were any major differences between the exam and the training they had already been given. Differences pertained to the greater detail provided in the RBS exam, particularly regarding licensing laws. In general, those who took the RBS exam felt that it was beneficial and easy to complete. Difficulty, on average, of revising was rated as 4.3 out of 10 and difficulty, on average, of passing was rated as 4.7 out of 10. Five of the six respondents who took the RBS exam felt that it helped them in their current job as it refreshed their memory for alcohol-related issues, provided more information on when and how to refuse service to customers and made them more vigilant for drunken groups and possible drug use.

**Knowledge and confidence in alcohol-related issues and occurrences**

All respondents were asked to rate their 'Knowledge about bar work and alcohol-related issues' and their 'Confidence in your own ability to deal with everyday occurrences within the job' on a scale of 1 to 10. On average, respondents rated
their knowledge as 8.1 and their confidence as 8.5. For those who took the RBS exam, respondents rated their knowledge as 8.6 and their confidence as 8.4, whereas for those who did not take the RBS exam, respondents rated their knowledge as 7.9 and their confidence as 8.5.

**Four scenarios from the RBS training manual**

In general, all respondents answered the four scenarios very well. In checking for underage customers, they knew to ask for appropriate identification and what to do when this was not provided.

When confronted with a customer who was attempting to purchase alcohol for a friend who had consumed too much alcohol, all respondents provided detailed answers detailing how they would only serve the friend alcohol, offer to serve them a non-alcoholic drink for their friend and provide warnings to the customer if their friend was seen drinking alcohol from that point on.

When asked to list any ways to help prevent trouble before it occurs, most respondents focused on the vigilance for large groups, excessive drinking and even underage customers. However, the RBS training guidelines also list regular supervision of all areas, collecting bottles and glasses regularly, maintaining good standards of hygiene and practice and creating a friendly atmosphere.

Finally, bar staff were very knowledgeable regarding factors that may affect differences in two friends’ drunken behaviour given that they had consumed the same alcoholic drinks, listing such factors as weight, gender, metabolism, food, drug use and age. However, one response that was often given, but not mentioned in the RBS training manual, was the possibility of spiked drinks.

Most bar staff had experienced customers who were too drunk, or too young, to be served alcohol. However, as might be expected, fewer bar staff reported experiencing verbal or physical threatening behaviour. Interestingly, though, the proportion of days on which these situations occurred has increased from respondent’s previous jobs to their current jobs. It is possible that this may reflect changes in the licensing laws and increased media portrayal of alcohol-related issues pertaining to excessive and underage drunken behaviour. Attempted underage drinking was more likely to occur before 7 pm whereas the refusal of customers for having had too much to drink, or verbally or physically threatening respondents, was more likely to occur after 8 pm. As one might expect, respondents felt most safe when having to refuse alcohol to a customer who was deemed too drunk or was unable to produce any appropriate identification (8.4 and 9.4 respectively) compared to when they were verbally or physically threatened by a customer (5.8).

With regard to RBS training, those who took the exam felt that it refreshed their knowledge and provided greater detail than their previous training. The exam was rated as quite easy to revise for and pass, as well as being beneficial. Interestingly, self-ratings of alcohol-related knowledge were higher for those bar staff who had taken the RBS exam than those who had not (8.6 vs. 7.9). Respondent’s replies to the four scenarios were very accurate with regard to dealing with drunken or underage customers and factors influencing drunkenness. However, they seemed to lack some knowledge on how the immediate environment of the bar/club could help to prevent trouble before it occurs. Finally, bar staff provided one factor that could affect drunkenness which was not listed in the RBS training manual, namely spiked drinks.

In sum, these data suggest that the level of training in city centre bar staff is of a generally high standard. This may indicate why no effect of the intervention was
observed. Specifically, the additional training offered by the RBS training only served as a refresher to in-house training and was not sufficient to change behaviour (in effect this constitutes a ceiling effect, bar staff could not improve further on the RBS scheme). Moreover, these data also suggest that any future intervention of the form used in the LB project should be preceded by a similar study, one that can determine what training is required and where.

4.6 Audit Data

This section reports data from the audits conducted across each survey evening.

4.6.1 Head Count

In the December 2004’s sample a higher ratio of male to female respondents was noted (63.62% men, \( p < 0.001 \) using a binomial probability test based on an expected 50/50 ratio of men to women). The bias in December 2004 could have constituted a sampling bias or have simply reflected a greater proportion of men in the areas surveyed. In order to test the latter hypothesis surveyors performed an hourly head count of men and women from January 2005 onwards. Two surveyors walked around the area surveyed each hour, one counted men the other women. These data supported the hypothesis that there were more men in the survey areas (62.10%) than women (37.90%, \( p < 0.001 \)).

4.6.2 Noise

Music from some licensed premises could be heard in the street. Surveyors felt that this detracted from the local environment, in particular in St Mary Street where two adjacent clubs piped different music onto the street effectively creating a noise.

Figure 14 Mean instances of loud noise heard by venue every survey night (graph removed in order to protect the anonymity of licensed premises)

In general, surveys found the noise from music highest on St Mary Street and that this noise detracted from the environment. Although no indication on whether its attenuation would improve the atmosphere in this area was provided by surveyors, it is the impression of the authors that its cessation could not in any way detract from this environment.

6.5.3. Safety
In general, surveyors felt safe whilst during the surveys and this did not change much throughout the year. The decrease in the safety rating, and increase in the fear rating, noted in August was due to a new surveyor joining the team on the Saturday night. They, and one other surveyor, were the only surveyors that night and their first survey resulted in an inebriated acquaintance of the respondent becoming agitated and threatening both surveyors. The encounter passed without any physical assault on the surveyors. Even though the surveyors moved from Wood Street to St Mary Street for the duration of that night’s survey, the new surveyor’s safety and fear rating was disproportionately affected by this encounter. However, the new surveyor participated in another six survey nights, did not encounter any other hostile situations and consequently rated their safety much higher and their fear much lower.

Figure 15 Average safety ratings (10 being most safe) by month

Figure 16 Average fear ratings (10 being most fearful) by month

4.6.3 Vomit

Observations of drinkers vomiting, or fresh vomit on the street, were usually noted less than once per hour. However, this figure is affected by the weather conditions: rain tended to wash exposed vomit away.
Mean instances of vomit witnessed per 100 people every hour by month

Figure 17 – Prevalence of vomit by month and estimated number of people in the immediate environment (estimated from headcount data)

### 6.5.5. Urination

Observations of urination were noted to decrease following a high during April. However, this slightly increased again in December.

Mean instances of public urination witnessed per 100 people every hour by month

Figure 18 – Prevalence of urination by month and estimated number of people in the immediate environment (estimated from headcount data)

### 6.5.6. Broken glass

Observations of broken glass were quite constant throughout the year, with less than 3 observations per 100 people being noted every hour. Following a decrease in the latter half of 2005, observations increased in December.
Mean instances of broken glass observed per 100 people every hour by month

Figure 19 Mean instances of broken glass witnessed per 100 people every hour by month

6.5.7. Litter

On the hourly audit surveyors were asked to estimate the relative quantity for different types of litter, these are presented in Table 22 which shows that the majority of the litter observed was either from food wrappers or flyers advertising events at local premises.

Table 22 – Quantities and types of litter

<table>
<thead>
<tr>
<th>Litter type</th>
<th>Mean instances of litter observed per 100 people every hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food wrappers</td>
<td>6-10</td>
</tr>
<tr>
<td>Glass items</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Polycarbonate glasses</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Other (mainly flyers)</td>
<td>6-10</td>
</tr>
</tbody>
</table>

A general finding was that litter increased over the course of the survey, unsurprising as the litter was mostly from products either consumed in the night time economy (such as food wrappers from takeaway restaurants or bottle and glass items from pubs and clubs) or through advertising to clients by way of leaflets. On the latter, leaflets would be given to clients who would mostly discard to the street after a cursory glance.

4.7 Evaluation

Two sources of data were used to assess the impact of server training on alcohol misuse and disorder, breath analysis data from the study and TASC data (see Section 3.2.4).

4.7.1 Breath analysis data

Server training was targeted at premises with higher average alcometer scores from their clients and through consultation with the police. Figure 20 presents
mean PBAL for respondents’ place of their last drink. Premises were divided into those that received server training (one or more member of staff passed the exam) and only premises with ten or more mentions per month were included. If the server training programme was successful then this should imply more responsible alcohol sales and therefore a reduction in mean PBAL. No evidence for an effect of server training on mean PBAL scores is evident.

Figure 20 – Mean PBAL by month for premises that successfully put one or more servers through the BIIAB server training scheme

Figure 20 presents mean monthly PBAL levels with standard error error bars of the mean. The data is grouped by whether respondent’s venue for their last drink received server training or not. A noticeable difference emerges between these two groups from March to July 2005. Those venues not receiving RBS training show significantly lower levels of mean PBAL compared with those venues that did receive training. A variety of information sources were used to determine those premises most likely to benefit from RBS training and the difference may have emerged because of this selection process, i.e., those subject to training were most likely to have misuse issues across the year.

If the server training had an effect on levels of consumption then we would expect to see, in Figure 20, a significant reduction in mean PBAL from trained premises. This does not occur, instead there is a reasonably flat trajectory with little significant change over the twelve months.

Figure 20 also provides some information on why no change in mean PBAL occurred. The mean levels of intoxication over the twelve months are fairly low. With the UK drink drive limit at 0.08mg/100ml a mean between 0.10 and 0.12 mg/100ml does not constitute a considerable increase on this level. Thus, servers may not have the opportunity to refuse service to the already inebriated in sufficient quantities to allow a noticeable change in the serve data.
4.7.2 External Data

TASC data (described in Section 3.2.4) was accessed. These data were restricted to incidents occurring on Fridays and Saturdays and between the hours of 10pm and 4am, covering the time surveyors were present on the Streets of Cardiff. The Project was embedded within other community initiatives designed to tackle similar problems as that targeted by LB (for example, see Appendix 6.1). Two initiatives are worth noting. First, the southerly third of St Mary Street was restricted to pedestrians only before the project began. From December 2005 the road closure was extended to the whole of St Mary Street. Second, fixed penalty notices were introduced and clients who appeared excessively drunk, disorderly or aggressive could receive on the spot fines. Previously, to charge individuals, police officers would take the defendant to a police station. Police colleagues suggest that the introduction of Fixed Penalty Fines have had two consequences on our interpretation of TASC data. First, because the effort involved in charging an individual was markedly reduced more charges were made. Second, because processing those who had been charged could be achieved without officers leaving the city centre this effectively increased the police man hours given over to patrolling the city centre. In combination, provisional results from police analyses suggests the police detect more incidents of disorder effectively increasing the number of incidents recorded and therefore appearing in the TASC dataset. Referring to Figure 21, a gradual increase in the number of recorded incidents is apparent towards the end of 2005 consistent with the putative consequences of additional police initiatives in the city centre. In sum, these data are not sufficient to assess the impact of LB on levels of disorder nor do they show any decrease in disorder over the latter stages of the project.

Figure 21 – TASC data from 1 June 2004 to 31 January 2005. Data are restricted to incidents recorded on Friday or Saturday and between the hours of 10pm and 4am. The vertical dashed line indicates when the Lions Breath Project was initiated. Server training began in July 2005 and continued until October 2005.
4.8 Conclusions

The survey provided a unique insight into the night-time economy. It was concluded that;

1. Number of underage drinkers was very low: less than 2% of drinkers
2. One third of drinkers were below the drink drive limit
3. One third of male drinkers and one fifth of female drinkers were more than twice the UK drink drive limit according to breathalyser data
4. Males outnumbered females in the city centre by around 2 to 1
5. Three quarters of respondents were non-smokers
6. 60% of respondents used taxis to get home: only 2.6% used public transport. More men than women walked home
7. Public litter comprised pub and club advertising material, food wrappers and glass bottles
8. RBS training did not affect blood alcohol levels
9. Slurred speech was found to be the best indicator of drunkenness
10. 40% of males and 25% of females had slurred speech
11. Interviews identified problem premises, facilitating targeted training

This project was developed on the putative relationship between intoxication and disorder. Of all those respondents approached so few responded aggressively that any strict relationship between aggression and intoxication must be refuted. A polite, even jovial, demeanor was the norm. Returning to the question on what constitutes alcohol misuse, a simple behavioural definition such that alcohol misuse is diagnosed by an aggressive demeanor is not sufficient. Given the majority of respondents were polite then all bar a small percentage of respondents have not misused alcohol.

Another way of defining misuse is by the short- and long-term effects on health including risk of injury. Currently the UK guidance is that 6 units or more for men or 4 units or more for women is the criteria for binge drinking, a level at which social drinking may begin to inflict harm on the consumer. There are two immediate problems with this level. First, judging by the data presented in this report, most respondents had consumed more than that criteria, thus risking alienation. Second, the relationship between units consumed and intoxication is strongly mediated by drinkers’ weight and other metabolic factors including past history of consumption, making a strict rule unrealistic. Furthermore, the physical manifestations of intoxication (such as slurred speech) may not reveal themselves until greater quantities have been consumed.

To what extent can servers in licensed premises realistically affect a reduction in alcohol misuse with no clear indication on what constitutes too much alcohol? It is this ambiguity, we argue, that most likely contributes to finding no measurable change in intoxication across the survey.

The project motivated a positive working relationship between project members, it has nurtured collaborative expertise in the community and opened channels of communication through which opinions can be voiced. However, some licensed premises did not become involved in this project. Some of these premises also had clients who scored high on the alcometer test and who looked drunk. While the project sought to target the RBS training on both baseline survey data and other intelligence many other factors, including willingness to participate in the LB Project should play a role determining those premises most suitable for targeted interventions.

Additional to the server training, data were collected that provide useful insights into the NTE. In particular, women were more likely to take a taxi compared to men who were more likely to walk, irrespective of their distance to place of
residence. Recent research into the fear of crime (Moore & Shepherd, 2006a; Moore & Shepherd, 2006b) suggest women are more fearful of violence than men. A problem with subjective responses however, is that they do not necessarily map onto actual behaviour and may mean nothing more than a response shift (see Dolan & Moore, in review, for a discussion of this and other factors that might bias subjective responses). Fear, in particular fear of personal harm, is also an important feature of the night time economy and the distinction between men and women in mode of transport home found in this study might provide an index for women's feelings of safety in the city centre.

Finally, information derived from this project was communicated to stakeholders in order to further reduce alcohol-related disorder. The project team presented at CCSP meetings and kept South Wales Police appraised of potential risks of alcohol misuse in certain licensed premises. No formal evaluation of this strategy is included in this report for two reasons. First, quantifying change at a policy level is difficult particularly where many factors will influence those decisions. Second, this report amounts to the principal means of communicating findings to policy makers and therefore subsequent change will likely follow the cessation of the project. Never-the-less, certain things did happen during the course of the project, for example, bins for glass item deposition were situated near to large licensed premises, the pedestrianised zone of St Mary's Street was increased over the Christmas period of 2005 and a prominent city centre bar came under considerable pressure, including threats that its license would be temporarily revoked, to tackle the levels of disorder and alcohol misuse in its patrons in part identified by the LB team. However, many of these issues had been mooted before the commencement of the LB project and it is difficult to determine how the activities of the project impacted on those decisions.

4.9 Recommendations

1. Surveys such as this, organised on a partnership basis, should be instituted in the night-time economy to identify alcohol misuse
2. Responsible drinking campaigns should be targeted at males in particular
3. Existing measures to curb underage city centre drinking are effective and should be maintained
4. Transport policy in the night-time economy should focus on taxi services much more than on public transport services
5. Half-hourly removal of food wrappers, advertising flyers and glass bottles from the street should be a major priority
6. From this study in-house server training does not need to be supplemented by additional training
7. Reliable tests of drunkenness are needed: from these findings the best option would be a new verbal test
References


5 Acknowledgements

This project, funded by the Alcohol and Education Research Council took place under the aegis of the Cardiff Community Safety Partnership and was designed to reduce alcohol misuse and disorder in Cardiff city centre. The Project Team received invaluable assistance from members of the Partnership in particular South Wales Police who provided time and resources without which the project would not have been so easily attained. The research involved analysis of datasets maintained by Nicola McLeese from the ‘Tackling Alcohol-related Street Crime’ initiative of South Wales Police, and the Emergency Department from Cardiff and Vale NHS Trust. The Project Team would like to thank all those involved with facilitating the project and in particular the surveyors who gave up their weekends and braved many an inclement evening surveying clients from Cardiff city centre into the early hours.
## 6 Appendices

### 6.1 Additional police activities in the NTE, 2005 onwards

The following list details ongoing strategies undertaken in Cardiff city centre across the LB project’s duration.

<table>
<thead>
<tr>
<th>Violent Crime – Tackling violent crime in the night-time economy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACTIONS</strong></td>
</tr>
<tr>
<td>Analysis to identify ‘Hot Spots’ and ensure robust policing, during peak problematic times</td>
</tr>
<tr>
<td>Targeted patrolling at times of peak demand, including Special Constabulary, Police Community Support Officers (PCSOs) and town wardens.</td>
</tr>
<tr>
<td>Police should make best use of variable shifts to increase resources available during peak demand times.</td>
</tr>
<tr>
<td>Deployment of an overt police video team. Consider filming the egress from licensed premises. This footage can be used to confront licensees, door supervisors and area managers with evidence of poor practice, such as drunken people leaving premises still drinking, people leaving with bottles and glasses, under age drinkers etc.</td>
</tr>
<tr>
<td>Search Powers: Section 60 of the Criminal Justice and Public Order Act 1994, where appropriate.</td>
</tr>
<tr>
<td>Mobile police station deployment to high demand areas.</td>
</tr>
<tr>
<td>Robust use of confiscation of alcohol legislation in relation to youths (Confinement of Alcohol (Young Persons) Act 1997 and Section 155 Licensing Act 2003 – power to confiscate both sealed and open containers.</td>
</tr>
<tr>
<td>Create defined alcohol prohibition zones. Where existing byelaws or designated alcohol prohibition zones under Sections 12 to 16 of the Criminal Justice and Police Act 2001 (CJPA 2001) are present, ensure robust policing and enforcement of the law, especially during peak demand time. Where no designated alcohol prohibition zone under CJPA 2001 is in place, consideration should be given to introducing such a zone. (See link for creation of Zones).</td>
</tr>
<tr>
<td>The offences of using obscene profane language in the street; throwing bottles/litter etc.; willfully obstructing the highway; Section 5 Public Order Act 1986; Urinating in the street. Details of the offender can be recorded on a database, they are warned and should they be warned again for these offences in next 6 months a prosecution will follow. The intelligence is also used to pursue ASBO’s and Acceptable Behaviour Contracts (ABC). (See Surrey Street Standards.)</td>
</tr>
<tr>
<td>CCTV: Fixed at strategic locations.</td>
</tr>
<tr>
<td>CCTV – mobile systems</td>
</tr>
<tr>
<td>A combination of high profile patrols, CCTV and improved lighting along specific routes out of the area could create a ‘safe route’, which should be well marketed. Deployment of bus marshals/taxi marshals at designated taxi ranks and bus stations at peak times.</td>
</tr>
<tr>
<td>Temporarily create a pedestrian zone surrounding the high concentration of night time economy premises and ensure resources are dedicated to police this area, I.e., parking attendants, traffic wardens, and police.</td>
</tr>
<tr>
<td>Food Outlets: Local authority to offer incentive for food outlets (mobile or resident) on egress routes with little or no provision. This will encourage the dispersal of groups competing for the same food.</td>
</tr>
<tr>
<td>Public Events: For major pre-planned public events use mobile triage/A&amp;E centres within the event area.</td>
</tr>
<tr>
<td>Taxi ranks: If more than one rank, ensure they are equidistant from the night time economy but distinct from each other to ensure dispersal of large groups competing for same transport. The designated taxi ranks should be away from other transport infrastructure I.e., bus stations to ensure dispersal of large groups.</td>
</tr>
<tr>
<td>Buses: Ensure public transport provision is in place for peak times, either subsidised by licensee forums, CDRPs or at normal rate. Consider a cash free bus, where tickets are purchased in clubs and buses are chartered by licensee’s forum. Police the transport system with police, PCSO’s, town wardens, Special Constables or other ‘capable guardians.</td>
</tr>
<tr>
<td>Refuse collectors deployed at peak times to remove litter capable of becoming a weapon, I.e., discarded bottles. It also has additional benefits of providing further capable guardians at peak times.</td>
</tr>
<tr>
<td>Secure glass and bottle banks and high profile promotion of the same. Also use on approaches to pre-planned public events.</td>
</tr>
<tr>
<td>Staggered closing times of public houses – minimising the number of people competing for the same transport and food outlets.</td>
</tr>
<tr>
<td>Taxis – Local CDRP budget can be used to subsidise locally registered taxis for installing CCTV in cabs.</td>
</tr>
<tr>
<td>Media campaign to promote use of taxis with CCTV and licensees forum agreements to only recommend or advertise taxis with CCTV.</td>
</tr>
<tr>
<td>Employ a high profile ‘capable guardian’ (E.g., taxi warden or bus inspectors) to provide an authority figure at this pinch point whilst co-ordinating egress by taxi or bus. In some areas this task is given to the door staff of licensed premises.</td>
</tr>
<tr>
<td>Routine visits to ‘hot spot venues’. Overt video recording inside premises by police or local authority licensing officers, obtaining accurate/visual evidence of drunken, quarrelsome behaviour, apparently...</td>
</tr>
</tbody>
</table>
underage customers, poor management etc.

<table>
<thead>
<tr>
<th>Joint visits with the Fire Service, Environmental Health Officers, Local Authority Licensing Officers regarding compliance with relevant legislation, i.e., fire escapes, door staff registration and licensing conditions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide a “Quality Charter Mark” to set the standards for licensed premises.</td>
</tr>
<tr>
<td>Serviceable CCTV installed in consultation with the local crime prevention officer, as part of licence conditions. This should be adopted for any new application or amendments to current licences.</td>
</tr>
<tr>
<td>Night Net Radio/paging systems for all pubs within close proximity or in areas of licensed premises saturation.</td>
</tr>
<tr>
<td>Safety glasses or plastic glasses and bottles.</td>
</tr>
<tr>
<td>Door staff to wear high visibility jackets and registration badge/photo ID</td>
</tr>
<tr>
<td>Discourage irresponsible happy hours and drinks promotions that could be construed as encouraging people to get drunk, which in turn has implications for allowing drunks on licensed premises and serving drunken people.</td>
</tr>
<tr>
<td>Regular visits to licensed premises during such promotions and filming/recording drunken behaviour or poor management could act as a deterrent.</td>
</tr>
<tr>
<td>Toilet attendants or CCTV in communal toilet areas.</td>
</tr>
<tr>
<td>Referral schemes for victims of crime whose drunkenness may have been a contributory factor to their victim status.</td>
</tr>
<tr>
<td>Polaroid or digital camera evidence should be obtained and corroborating notes should be made of injuries sustained by victims.</td>
</tr>
<tr>
<td>Involve NHS/Primary Care Trusts (PCT) in intelligence gathering.</td>
</tr>
<tr>
<td>Consider a free phone direct line for victims at A&amp;E to speak to police</td>
</tr>
<tr>
<td>Data exchange protocols with the NHS or PCT will be a matter for local consultation.</td>
</tr>
<tr>
<td>CDRPs and police. Given appropriate protocols and safeguards, information on offenders can be passed to members of the forum as a tool to prevent crime and disorder.</td>
</tr>
<tr>
<td>Pubwatch – clubwatch schemes – consider the CDRP funding for managing the administration. This will maintain consistency and sustain the scheme.</td>
</tr>
<tr>
<td>Media/Marketing campaign to target potential victims, heightening their awareness of risks associated with drunkenness, binge drinking, spiked drinks etc. Also advice on safe routes home, taxi schemes and buses.</td>
</tr>
<tr>
<td>Victim support referral for all victims, increasing confidence in support mechanisms therefore increasing the likelihood of the victim supporting a prosecution and assisting the police and Criminal Justice System.</td>
</tr>
<tr>
<td>Make more use of Section 6 of the Licensing Act 1902, which allows for any individual who has been convicted of offences related to drunkenness three (3) times in the last 12 months to be banned by the courts from buying alcohol from ANY licensed premises for three (3) years.</td>
</tr>
<tr>
<td>Make more use of exclusion orders. The Licensed Premises (Exclusion of Certain Persons) Act 1980, notes that; following a conviction for an offence committed on licensed premises, involving violence or threats of violence, the court can make an order prohibiting the person from entering those premises and any other specified licensed premises.</td>
</tr>
<tr>
<td>Forces should have a policy of positive action for low level public disorder. This will re-draw the threshold of what is acceptable behaviour within the night-time economy. This has to be policy to ensure consistency and drive home the message to those visiting the area.</td>
</tr>
<tr>
<td>Information regarding specific premises should be shared with local authority officers who are also likely to be gathering intelligence for licensing purposes. Police should have a policy of victimless prosecutions where admissible evidence is available, i.e., CCTV, showing disorder peripheral to an assault where the victim will not prosecute.</td>
</tr>
<tr>
<td>The proactive use of bail conditions should become the norm and evidence should be provided to the courts of the negative impact to the community the drunken behaviour is having, in support of the request for bail conditions. A CPS and Police policy is required to ensure a corporate approach to prosecution in a set area irrespective of the Severity of the offence, taking into account matters of local interest.</td>
</tr>
<tr>
<td>Test purchase operations should be conducted at on and off licensed premises, including supermarkets, by the local authority trading standards officers, based on intelligence of under age sales.</td>
</tr>
<tr>
<td>Introduction of a tamper proof wristband to be issued to youths who can prove their age by passport/photographic driving license or other trusted means.</td>
</tr>
<tr>
<td>Make use of the new fixed penalty notice offences, such as drunk and disorderly, buying alcohol for under 18s, drunk in the highway, section 5 public order and wasting police time, giving a false report. (CIPA 2001, section)</td>
</tr>
<tr>
<td>Post Arrest Support teams should be employed to deal with offences involving the night time economy.</td>
</tr>
<tr>
<td>Creation of a generic, comprehensive feedback sheet for officers employed on initiatives within the night-time economy during peak demand. These should be fed to the licensing team. This will provide a holistic view of occurrences during the given period and could influence the next tasking and co-ordination.</td>
</tr>
<tr>
<td>The creation of a dedicated telephone number for the public to phone the police and confidentially report under age sales of alcohol by both on and off licenses. This information can be activated jointly by police and local authority trading standards officers.</td>
</tr>
</tbody>
</table>
| News of convictions should be publicised internally and locally, in newspapers, local radio and internal communication mechanisms. This will act as a deterrent to others and a re-assurance to the community that the authorities are taking the matter seriously and a source of motivation for staff who will see the
benefits of any initiative.
Promotion of ‘No ID no entry’ theme, backed by a divisional policy of the prosecution of licensees found to have more than a set amount of under age drinkers Development of alcohol arrest referral scheme.

### ADDITIONAL ACTIONS
- Creation of a Night time economy co-ordinator through the CDRP
- Specific scrutiny in all assaults committed by door staff to ensure a professional approach
6.2 Pilot Study

Three members of Lion Breath Committee (Ian Tumelty, Ruth Weltch and Simon Moore) visited the pedestrian zone of St Mary Street to conduct a brief pilot survey. The aim of this pilot was to assess methodology, assess what proportion of participants would be willing to be breath tested and to generally explore how research could be conducted in this environment.

**Main findings:-**

► 94% of participants said they would be willing to have their breath tested if the study were repeated.
► Study location biased sampling towards those participants who attended nearby nightclubs (27%, Philharmonic; 27% Life)
► 22% of the sample stated that they had drunk most at ‘home’ that evening
► Some evidence to suggest sampling biases and issues of inter-rater reliability needs to be addressed
► A sampling rate of approximately 10/hour/rater was achieved
► Taxi (52%) and walking (20%) were main transportation routes home, also a proportion were booked into local accommodation (12%) and did not therefore need transport home

**Observations and Conclusions**

Obtaining the random sample:
► The study location should be moved around town so as to reduce bias towards particular clubs and pubs.
► Random sampling technique needs to be enforced
► Inter-rater reliability needs to be assessed

Other proxy measures of drunkenness could be targeted
► Number of vomit patches on the road and pavement within the pedestrianised area
► Number of times glass is heard to brake
► Visual count of people staggering: It may be possible to video record pedestrians within the pedestrianised zone for later scoring.

Possibilities exist to adapt materials from the Home Office ‘Alcohol Misuse Enforcement Campaign.’ This campaign involves audits assessing social and physical disorder. To be discussed.
6.3 Newsletters

6.3.1 May 2005

Lions Breath Project Newsletter

Introduction
Welcome to the first edition of the Lions Breath Project Newsletter. Each quarter the newsletter will provide an update on the progress of the project with latest results from the surveys and information on implementation of the interventions.

Items:
Page 1:
- About the project
- The team
- Contact details
Page 2:
- Results so far
- Intervention
- Feedback
- Information resources

Contact Details
For more information contact
Dyery Cusens
Phone 030 20744253
Email: ouenid@cardiff.ac.uk

Address: Violence and Society Research Group,
Oral Surgery, Medicine and Pathology, Cardiff University, Cardiff, CF14 4XY

About the project
Background
Lions Breath builds on the success of previous partnership projects that have successfully brought about a reduction in alcohol-related violence in the city centre over the past few years.

Aims
To promote sensible drinking in Cardiff city centre and investigate ways to make the city centre safer and reduce the incidence of alcohol related harm.

Objectives
1. Reduce levels of intoxication and mis-selling of alcohol.
2. Improve safety and environment of Cardiff city centre.

Methods
1. A survey of users of the nightlife economy incorporating a short questionnaire on drinking during the evening and a breathalyser test.
2. Audits of the physical and social context of specific areas of the city centre.

Procedure
A team of researchers 'take to the streets' on a Friday and Saturday once each month between the hours of 11pm and 3am. The location of the survey is rotated between St Mary Street, Wood Street and Greyfriars Road in order to get a balanced view of Cardiff city centre.

Duration
Data collection began in December 2004 and will continue until February 2005.

The Team
Lions Breath is a multi-agency partnership project funded by the Alcohol and Education Research Council (AERC)

- Bryan Cusens: Project Coordinator
- Rhoda Emily-Jones: Chair of the Substance Misuse Action Team
- Dr Simon Moore: Cardiff University
- Erica Parker: Cardiff Community Safety Partnership
- Prof Jonathan Shepherd: Cardiff University/Cardiff & Vale NHS Trust (chair)
- Mark Smith: Cardiff Community Safety Partnership
- Sergeant Ian Tumante: South Wales Police
- Sergeant Dave Geaves: South Wales Police

Researcher with 2 participants in December 2004
Results so far

1. A quarter of people surveyed were within the legal UK driving limit, 2% were more than three times over the limit, and everyone else was somewhere in between.

2. Men generally showed higher blood alcohol levels than women.

3. 78% of people approached responded politely, 18% responded with a humorous/playful manner. So far, only 1 person has responded aggressively. Consequently, researchers generally feel safe during the course of the survey nights.

4. Blood alcohol level can be significantly associated with outward displays/signs of drunkenness, which is inconsistent with the view of people ‘playing drunk’.

5. From the environmental audits, at least one waste bin was found to be empty at all times, but food wrappers and glass bottles were frequently deposited on the streets.

6. Other types of low level disorder such as spitting and aggressive shouting are frequently evident, although actual violence is rarely witnessed.

Information Resources

Lions Breath website: www.lions.of.ac.uk
British Institute of innkeeping website: www.bii.org

Percentage blood alcohol level
by expected behaviour

Intervention

This month the intervention phase of Lions Breath will begin. This includes enabling at least 60 city centre bar staff to receive training on Unit One of the National Bar-Persons Certificate, awarded by the ‘British Institute of Inn-keeping’ (BII). This unit equips bar staff with an understanding of the law and the responsibilities associated with serving alcohol. It covers a number of key issues, including:

1. The law about alcohol and young people
2. Those who can be refused drinks in licensed premises
3. How drinks are controlled by law, how the strength of a drink is measured and what a unit of alcohol is
4. The circumstances which may lead to violence on licensed premises and how trouble can be prevented
5. How barpersons can help to promote social responsibility in the use of alcohol
6. How to act responsibly over ‘happy hours’

This training comprises a self-study workbook and an automated telephone exam.

To nominate bar staff for training please contact Bryan on 029 20744253.

Feedback

If you would like to feedback your thoughts/operators ideas to the Lions Breath team please email Bryan: rusems@cardiff.ac.uk
Your comments will be valued and appreciated.
Lions Breath Project Newsletter

160 city centre bar staff sign up for free server training

Project Overview

The Lion’s Breath project is investigating drinking in Cardiff’s nightlife economy using questionnaires and breathalysers. Information is being used to identify those selling to underaged and intoxicated people, to target bar staff training and to improve city safety.

Server Training Update

Participants

- 160 city centre bar staff have been referred for server training from a total of 23 licensed premises.
- 24 people have taken the exam so far have passed.
- The first person to pass the exam was from ‘Innocent’.
- ‘The Yard’ and ‘The Goal Major’ have put the most people through the exam so far.

Agata Matusz (pictured right) works at The Yard Bar and Grill on St Mary Street and scored full marks on the exam. She said: “I found the training useful, particularly the information on the law and licensing, I found the exam easy after 2 hours of preparation. The qualification will be very useful when I go for promotion because it has given me essential knowledge.”

What is the training?

Unit One of the National Bar-Persons Certificate, awarded by the British Institute of Inn-keeping (BII) equips bar staff with an understanding of the law and the responsibilities associated with serving alcohol.

This training comprises a self-study workbook followed by an automated telephone exam.

What are the benefits?

- Free training
- Ensure professional staff
- Complement licensee aims and responsibilities
- Minimise impact of AMEC text purchasing operations and Fixed Penalty Fines

Although all the free training places provided by Lions Breath have been taken it is not too late to get your staff trained. Contact the BII on 01270 204449 or email niongroup@bii.org

Contact Details

For more information or to feedback your thoughts and opinions contact Dr Simon Moore:
Phone: 020 26744246, Email: mooreasim@cardiff.ac.uk
Address: Violence and Society Research Group, Oral Surgery, Dental School, Cardiff University, Cardiff, CF14 4XY
Relevant websites: Lions Breath www.lionsbreath.org British Institute of Innkeeping website www.bii.org
Cardiff Community Safety Partnership website www.cardiffcommunitysafety.co.uk
Survey Results

- 700 people have been interviewed and have given breath tests.
- The average age of respondents is 25.
- For every 1 woman there are 2 men in Cardiff on weekend nights.
- Men have provided higher breath alcohol readings than women.
- 3 women and 14 men surveyed have been over 2 times the drink-driving limit.
- 1% of those surveyed have been within the drink-driving limit.
- Only 8 people have responded 'aggressively' towards the surveyors, who on the whole, felt safe and enjoyed the work.
- Most respondents are polite.
- Most people surveyed are from Cardiff and the surrounding area, although we have interviewed people from as far afield as New Zealand.

Other observations

- Door supervisors frequently show a proactive and responsible attitude towards maintaining a positive atmosphere.
- Glass items are brought on to the streets from outside the city centre, and from inside licensed premises.
- Violent incidents are infrequently witnessed by surveyors.

Examples of good practice

- Public urination is rife and shameless: surveyors have seen men urinate through a restaurant letterbox and against a taxi.
- Aggressive behaviour in men is often primitive i.e., taking off shirts to bare chest, putting faces up close like stag's looking horns.

The Team

Lions Breath is a multi-agency partnership project funded by the Alcohol and Education Research Council (AERC)

Dr Nicholas Perham  Project Coordinator
Rhoda Emlyn-Jones  Chair of the Substance Misuse Action Team
Dr Simon Moore  Cardiff University
Enrica Panter  Cardiff Community Safety Partnership
Prof Jonathan Shepherd  Cardiff University/Cardiff & Vale NHS Trust (Chair)
Mark Smith  South Wales Police
Sergeant Dave Greens  South Wales Police
Sergeant Ian Timms  South Wales Police

Cardiff statistics

The project is aiming to complement the following achievements:

- Alcohol-related violence in Cardiff reduced by 10.4% since 2001.
- A near 20% reduction in the number of people attending the city's A&E department for treatment to alcohol-related injuries since 2002.

The project team would like to thank:

Kirkland Davies and Nick Newman who have been particularly helpful in promoting a management-led approach to recruitment for server training.

Richard Jackson for supporting and promoting the intervention through the licensees forum.

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Do not quote any part of this document without permission of Dr Simon Moore, Cardiff University.

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Do not quote any part of this document without permission of Dr Simon Moore, Cardiff University.
Introduction
Welcome to the third edition of the Lions Breath Project Newsletter. Each quarter the newsletter will provide an update on the progress of the project with latest results from the surveys and information on implementation of the interventions.

Brief overview of project
We are investigating the drinking behaviours of the users of Cardiff's nighttime economy (NTE) and working within the Cardiff Community Safety Partnership to reduce the levels of alcohol-related crime that has become associated with it.

Our contribution is achieved in two ways:
- By obtaining user (e.g., breath alcohol levels) and an environmental audit (e.g., headcount) on the NTE on monthly survey nights.
- By encouraging Responsible Beverage Server (RBS) training for bar staff. So far, 50 bar staff (out of 160) who registered to take part have successfully passed the exam.

The final survey nights are on Friday 16th and Saturday 17th December. If you are out and about, please say “Hello” and we will even give you a lollipop!

Survey data update
- 10% of those surveyed say they have drunk most alcohol at home.
- 31% smoke
- In terms of getting home after a night out, 55% say they will take a taxi, 24% walk and 12% will get a lift. Public transport only accounts for 2% of journeys home.
- 74% of those approached have agreed to participate in the survey. Overall we have breathanalysed 813 people.
- The oldest person interviewed was 59 years old, the average is 25 years.

Audit data
- Cardiff city centre is a safe environment with interviewers feeling very safe conducting the surveys (9 out of 10).
- Visible signs of violence are witnessed less than once every three hours.
- In the City Centre there are twice as many men as there are women. The number of people decreases from 11 pm to 2 am. More people are out on a Saturday night compared with a Friday night. Numbers are slightly higher during colder months.
- Levels of extreme intoxication, as indicated by vomiting, are witnessed less than once every three hours.

The team
Lions Breath is a multi-agency partnership project funded by the Alcohol and Education Research Council (AERC).

Dr Nick Perham
Project Co-ordinator
Rhoda Emily-Jones
Chair of the Substance Misuse Action Team
Dr Simon Moore
Cardiff University
Erica Palmer
Cardiff Community Safety Partnership
Prof Jonathan Shepherd
Cardiff University/Cardiff & Vale NHS Trust (Chair)
Mark Smith
Cardiff Community Safety Partnership
Sergeant Elaine Greaves
South Wales Police

Thank you
Brains Brewery training
Media coverage
Contact details
Information resources
Bar staff interview data

Twenty three staff from ten premises were interviewed to obtain their experiences in the licensing industry.

- On average, staff had worked in their current job for just over a year.
- Sixteen staff had refused service to a customer in the two weeks before being interviewed because the customer was deemed to be too drunk. Most incidents occurred after 8 pm.
- Sixteen staff had refused to serve a customer in the two weeks before being interviewed because the customer was thought to be too young and could not produce any valid ID. Most of these incidents occurred before 7 pm.
- Seven staff had been verbally threatened by a customer in the month before being interviewed.
- Staff had high job satisfaction (8 out of 10 on a rating scale) and felt very safe at work (9.8 out of 10).

BIIAB Level 1
Award in Responsible Alcohol Retailing

There is a new licensing award that coincides with the introduction of the new licensing laws.

“The qualification provides essential knowledge and understanding of the responsibilities of alcohol retailers authorised by a personal licence holder to sell alcohol... to enable those who complete the qualification to act within the law to support the designated premises supervisor to retail alcohol responsibly on their licensed premises.”

- Alcohol retailers can face a fine of £80 if they serve alcohol to someone who is drunk.
- Alcohol retailers can face a fine of £50 if they serve alcohol to a child.
- Children under the age of 18 may face a fine of £50 if they are caught purchasing alcohol.
- The fines are the fixed penalty amounts. If a person is prosecuted the penalties are much higher.

British Institute of Innkeeping website: www.bii.org

Thank you
To Bryony Coates for all her hard work in getting the Lions Breath project up and running and forging such good links with licensees and other agencies. Good luck on your clinical psychology course.

To all the licensees and bar staff who co-operated in the RBS training and staff interviews over the last year.

To all interviewers and interviewees who have helped on the surveys nights.

Brains Brewery training

According to Nick Newman at The Yard, Brains Brewery are to introduce an Electronic Learning Box to aid staff in their training. The portable device will be able to be passed round to licensed premises for a week at a time to train and examine staff on a variety of issues relating to the industry. Failing some exams will result in a BII qualification.

Media coverage

Dr Simon Moore was interviewed about the Lions Breath project for ITV Wales on Tuesday 15th November. This was broadcast on Wednesday 19th November.

Lions Breath has been mentioned on BBC Wales Today, BBC Online, BBC Ceebeex, Red Dragon FM and in the South Wales Echo.

The RBS training has been mentioned in articles published in Drink and Drug News, The Publican and Off License News.

As part of the Alcohol Misuse Enforcement Campaign (AMEC), the Home Office named Cardiff among five super cities; the others are Bristol, Manchester, Nottingham and Newcastle.

Contact Details
For more information or to give your thoughts, opinions and ideas to the Lions Breath team please contact:
Nick Perham
Volence and Society Research Group,
Oral Surgery, Medicine and Pathology, Cardiff University,
Cardiff, CF14 4XY
029 20 744253
perhamn@cardiff.ac.uk
Your comments will be valued and appreciated.

Information Resources
Lions Breath website:
http://www.lions.cf.ac.uk/index.htm
Cardiff Community Safety Partnership website:
www.cardiffcommunitysafety.co.uk
6.3.4 March 2006

Lions Breath Project Newsletter

Surveys are complete

The final surveys of Cardiff’s night-time economy (NTE) were completed on 16th/17th December 2005. These surveys, which began in December 2004, were used to assess the impact of responsible server training (RBS) on levels of intoxication and to provide a more accurate picture of the NTE.

FBAL, age and gender data

The majority of people interviewed and breathed upon between the ages of 18 and 30 (see Figure 1). There were fewer people interviewed in the age groups of 16 to 18 and over 35. Male FBAL was greater than female FBAL for all age groups with the exception of the age groups 15 to 20 and 45 to 60 (see Figure 2). However, there were fewer people interviewed in these age groups.

Figure 1

Percentage of gender by age category

Figure 2

FBAL by age and gender

Media coverage

- Lions Breath project was mentioned by BBC Wales over Christmas 2005.
- Success in tackling violent crime was reported by the South Wales Echo and Western Mail over Christmas 2005.
- Professor Jonathan Shepherd appeared on BBC ‘Wales Today’ on 9 February.
Peak blood alcohol levels (PBAL): percentage of alcohol per parts blood in the body.
For example, 0.10 PBAL equals 1 part alcohol per 1000 parts blood.

- Average PBAL was 0.123
- Average male PBAL was 0.133
- Average female PBAL was 0.103
- Highest PBAL recorded was 0.331: Male on December 2005 survey

- 25.52% people are under the drink driving limit of 0.08 PBAL
- 19.79% males are under the drink driving limit of 0.08 PBAL
- 36.84% females are under the drink driving limit of 0.08 PBAL

Lions Breath project team:
Lions Breath is a multi-agency partnership project funded by the Alcohol and Education Research Council (AERC)

Professor Jonathan Shepherd
Cardiff & Vale NHS Trust (Chair)

Dr Simon Moore
Cardiff University

Dr Nick Perham
Project co-ordinator

Bryony O'Connor
Project co-ordinator

Rhoda Emily-Jones
Chief of the Violence Against Women Action Team

Enoch Painter
Cardiff Community Safety Partnership

Mark Smith
Cardiff Community Safety Partnership

Ian Tumblety
South Wales Police

Thank you
We would like to thank all those agencies and people who have made the Lions Breath project a success. In particular, we wish to express our gratitude to all the licensees who have participated in the project and the server training, with a special mention to Richard Jordon and Nick Newman who have been invaluable sources of information and important points of contact.

The project would not have been possible without the support and cooperation of South Wales Police who have attended our meetings, provided vital information with regard to other projects in Cardiff, assisted with other agencies on our behalf, supported us on our survey nights, and, possibly most importantly, provided us with a mobile police station on those chilly survey nights.

As the project was concerned with assessing the impact of NBS training on levels of intoxication, we thank Lion Laboratories for the use of their accelerometers and the BIA5 for the use of the Unit One of the National Bar-Persons Certificate exam.

Thank you to those people who conducted, and participated in, the surveys.

Finally, this project would not have been achieved without the funding provided by the AERC.

Contact Details
For more information or to give your thoughts, opinions and ideas to the Lions Breath team, please contact:

Nick Perham
Violence and Society Research Group
Oral Surgery, Medicine and Pathology, Cardiff University,
Cardiff, CF14 4XY
029 20 443253
perhamn@cardiff.ac.uk
Your comments will be valued and appreciated.

Information Resources
Lions Breath website:
http://www.lions.cf.ac.uk/index.htm
Cardiff Community Safety Partnership website:
www.cardiffcommunitysafety.co.uk
## 6.3.5 Ongoing audit

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<th>0100-0600</th>
<th>0600-1200</th>
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<td>Breaking glass</td>
<td>e.g. visual or auditory evidence</td>
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<tr>
<td>Anti-social behaviour</td>
<td>e.g. spitting, public urination, gesturing</td>
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<td></td>
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<tr>
<td>Aggressive shouting</td>
<td>e.g. abusive, threatening, or angry verbalisations</td>
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<td>Aggressive/disorderly behaviour</td>
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<td>Visible signs of violence</td>
<td>e.g. pushing, shoving, hitting, kicking or using weapons, arrests</td>
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### Other observations

### Refusals

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<td></td>
<td></td>
</tr>
<tr>
<td>Walk</td>
<td>Severe Impaired</td>
<td>Stepping</td>
<td>Normal</td>
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<td></td>
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<td>Response</td>
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<td>Joke</td>
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<td>Evasive</td>
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<tr>
<td>Eyes</td>
<td>Glazed</td>
<td>Clear</td>
<td>Unknown</td>
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<td>Slurred</td>
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<tr>
<td>Drunkenness (1-10)</td>
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6.3.6 Hourly audit

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<td>----------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Area</strong></td>
</tr>
</tbody>
</table>
| On a scale of 1-10 where 10 is the safest you've ever felt, how safe do you feel now?  
On a scale of 1-10 where 10 is the most fearful you've ever felt, how fearful do you feel now? |
| **Weather** | Persistent rain | Snow | Drizzle | Clear |
| Temperature | Freezing | Chilly | Warm | Frosty | Hot |
| Number of items/areas/patches/signs | vomit | Broken glass | Blood | Public urination |
| **Litter (discrete items or piles)** | 0 | Under 5 | 6-10 | 11-15 | 16-20 | Over 20 |
| Food wrappers |  |  |  |  |  |
| Glass items |  |  |  |  |  |
| Poly carb glasses |  |  |  |  |  |
| Other |  |  |  |  |  |
| **Music on street** | None | Perceptible | Loud |
| Source of music on street (name of establishment) |
| **Obvious signs of drunkenness** | 0 | under 5 | 5-10 | Over 10 |
| Drunken groups |  |  |  |  |
| Isolated individuals |  |  |  |  |
| **Open public prostitution** | Absent |  | Present |  | Ambiguous |  |
| Signs of drug use | Silver foil | Roaches | Phials | Other drug paraphernalia |
| Zip bags |  | Syringes |  |
| **Dysfunctional lighting (number of lights that should be working but are not)** |
| **Waste bins (number)** | Empty | Full | Overflowing | N/A |
| **Other perceptions of the environment, atmosphere, people, licensed premises, police etc.** |

<table>
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<tr>
<th><strong>Head count</strong></th>
<th><strong>Male</strong></th>
<th><strong>Female</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Start time</strong></td>
<td>Finish</td>
<td></td>
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Page 70
6.4 Individual questionnaire

The subjective ratings section at the bottom of the questionnaire were repeated on the reverse side of this form to allow the second surveyor to record their observations and to facilitate inter-rater reliability scores to be calculated.
6.5 Media: BBC Wales Online

8 September 2005 “Staff Trained on Trouble Drinkers”

More than 150 bar staff in Cardiff are to be trained in how to help cut binge drinking and the trouble it causes.

They will have lessons in what they can and cannot serve as well as tips on how to head off alcohol-related violence.

The initiative is part of a community safety project which has seen the number of drink-fuelled injuries in the city cut by a fifth since 2002.

Organisers have warned that bars which break licensing laws could be fined or have their licences revoked.

The idea of giving bar staff specific advice on how to encourage responsible drinking - and catch out underage drinkers - was developed after researchers interviewed 800 people.

Their findings suggest that alcohol-related problems in Cardiff city centre are caused by a small minority of drinkers.

Around 700 drinkers provided breath tests for the survey. Of these, 17 were three times over the drink-drive limit, while a quarter were within the limit.

The training, conducted by the British Institute of Inn-keeping Awarding Body, aims to reduce binge drinking and associated problems such as violence and anti-social behaviour.

The training aims to improve working practices to end the sale of alcohol to drunk or underage customers as well as to help bar staff when they are handling potentially difficult situations.
'Losing licence'

The initiative marks an intervention by the Lion’s Breath research project, led by the Cardiff Community Safety Partnership and backed by police, Cardiff University and the Alcohol Education and Research Council.

Project chair, Professor Jonathan Shepherd, said: "One key aim is to attempt to improve the working practices of the city’s licensees, which includes work around the mis-selling of alcohol to drunk or underage customers.

"Both acts are illegal and can result in a licensee being fined and losing his/her licence.

"This is not what we want to see, as Cardiff is largely a safe, vibrant and successful city.

"However, we are mindful that such alcohol sales can increase the level of danger faced by those being inappropriately served, other revellers and innocent bystanders who become the victims of alcohol-related violence."

'Night-time economy'

Dr Simon Moore, from Cardiff University, said its surveys found "excessive drunkenness, disorder and aggression" were exhibited by a minority.

"The vast majority of people enjoy the city’s pubs, clubs and restaurants and, on the whole, drink sensibly," he added.

Erica Painter, from the Cardiff Community Safety Partnership, said the interviews were helping to establish "a picture of Cardiff’s night-time economy".

A South Wales Police spokesman added it was always looking for new ways to make Cardiff safer.
More than 150 bar staff in Cardiff are being trained in how to help cut binge-drinking.

The training is part of a research project to understand the alcohol-related problems blighting our town centres.

Hundreds of early-hours revelers have been quizzed and breathalysed by researchers in the city centre.

Chairman of the Lions Breath project Professor Jonathan Shepherd said a main aim was to see if it was possible to prevent people getting dangerously drunk.

He said: 'One key aim is to attempt to improve the working practices of the city's licensees, which includes work around the miss-selling of alcohol to drunk customers.'

Yard manager Nick Newman, a 45-year-old dad of two, has put seven of his staff through the training and admitted it was often a 'hairline' decision if someone was too drunk.

His employee Agata Matusz, 22, said: 'The course teaches you that if someone is too drunk you have the right to stop serving them.'

Of the staff taking part in the British Institute of Inn-keeping training, all 48 who have taken the exam have passed.
6.7 Bar Staff interview Questions

6.7.1 Interview questions – not receiving RBS training

Personal information
Date of birth
Postcode
Have you lived anywhere else before Cardiff?
In total, how long have you worked in a licensed premise?

Your current job
How long have you worked here?
Briefly describe your role within the bar/club:

Have you ever been assaulted during the course of your job? Yes No
Have you refused a customer who has had too much to drink? Yes No
When was the last time that this happened?
Around what time of day was it?
What was the atmosphere in the pub/club like at that time?
How did the person react?
On a scale of 1 to 10, how safe did you feel?
1 2 3 4 5 6 7 8 9 10

In your current job, approximately how many times have you refused to serve someone because you thought they had had too much to drink?
In your previous bar work, approximately how many times have you refused to serve someone because you thought they had had too much to drink?

Have you refused a customer you thought was too young to be served alcohol? Yes No
When was the last time that this happened?
Around what time of day was it?
What was the atmosphere in the pub/club like at that time?
How did the person react?
On a scale of 1 to 10, how safe did you feel?
1 2 3 4 5 6 7 8 9 10

In your current job, approximately how many times have you refused to serve someone because you thought they were too young to be served alcohol?
In your previous bar work, approximately how many times have you refused to serve someone because you thought they were too young to be served alcohol?

Have you ever been verbally or physically threatened by a customer? Yes No
When was the last time that this happened?
Around what time of day was it?
What was the atmosphere in the pub/club like at that time?
How was the situation resolved?
On a scale of 1 to 10, how safe did you feel?
1 2 3 4 5 6 7 8 9 10
In your current job, approximately how many times have you been verbally or physically threatening by a customer while working in licensed premises?

In your previous bar work, approximately how many times have you been verbally or physically threatening by a customer while working in licensed premises?

On a scale of 1 to 10, how would you rate your:

**Job satisfaction**
1 2 3 4 5 6 7 8 9 10

**Safety at work**
1 2 3 4 5 6 7 8 9 10

**Bar staff training**
What training have you been given in your current job?

Have you had formal training in your previous bar jobs that have informed you about licensing laws and how to deal with awkward customers?
Yes  No

Are there any aspects of bar work that you would like to receive training, or more training, on?  Yes  No
If so, what are they?

On a scale of 1 to 10, how would you rate your:

**Knowledge about bar work and alcohol-related issues**
1 2 3 4 5 6 7 8 9 10

**Confidence in your own ability to deal with everyday occurrences within the job**
1 2 3 4 5 6 7 8 9 10

**Example situations**

- How would you deal with a customer you believed was younger than 18 years of age?

- How would you deal with a customer buying a drink for a friend who was showing signs of glazed eyes and incoherent speech?

- Can you name any ways that may help to prevent trouble before it occurs?

- How might you explain the difference in two friends’ drunken behaviour given that they have both drunk the same drinks all evening?
6.7.2 Interview questions – received RBS training

Personal information
Date of birth
Postcode
Have you lived anywhere else before Cardiff?
In total, how long have you worked in a licensed premise?

Your current job
How long have you worked here?
Briefly describe your role within the bar/club:

Have you ever been assaulted during the course of your job?  Yes  No
Have you refused a customer who has had too much to drink?  Yes  No
When was the last time that this happened?
Around what time of day was it?
What was the atmosphere in the pub/club like at that time?
How did the person react?

On a scale of 1 to 10, how safe did you feel?
1  2  3  4  5  6  7  8  9  10

In your current job, approximately how many times have you refused to serve someone because you thought they had had too much to drink?
In your previous bar work, approximately how many times have you refused to serve someone because you thought they had had too much to drink?

Have you refused a customer you thought was too young to be served alcohol?  Yes  No
When was the last time that this happened?
Around what time of day was it?
What was the atmosphere in the pub/club like at that time?
How did the person react?

On a scale of 1 to 10, how safe did you feel?
1  2  3  4  5  6  7  8  9  10

In your current job, approximately how many times have you refused to serve someone because you thought they were too young to be served alcohol?
In your previous bar work, approximately how many times have you refused to serve someone because you thought they were too young to be served alcohol?

Have you ever been verbally or physically threatened by a customer?  Yes  No
When was the last time that this happened?
Around what time of day was it?
What was the atmosphere in the pub/club like at that time?
How was the situation resolved?

On a scale of 1 to 10, how safe did you feel?
1  2  3  4  5  6  7  8  9  10

In your current job, approximately how many times have you been verbally or physically threatening by a customer while working in licensed premises?
In your previous bar work, approximately how many times have you been verbally or physically threatening by a customer while working in licensed premises?

On a scale of 1 to 10, how would you rate your:
Job satisfaction
1 2 3 4 5 6 7 8 9 10
Safety at work
1 2 3 4 5 6 7 8 9 10

**Bar staff training**
What training have you been given in your current job?

Are there any major differences between the training you have received in your current job and the exam you took?
Yes  No
If so, what are they?

Have you had formal training in your previous bar jobs that have informed you about licensing laws and how to deal with awkward customers? Yes  No
Are there any aspects of bar work that you would like to receive training, or more training, on?
Yes  No
If so, what are they?

Please describe your thoughts on the bar staff training exam:

On a scale of 1 to 10, how would you rate:
The difficulty of revising for the exam
1 2 3 4 5 6 7 8 9 10
The difficulty of passing the exam
1 2 3 4 5 6 7 8 9 10

Do you feel the training has helped you in your work?  Yes  No
In what way(s) has it helped?

On a scale of 1 to 10, how would you rate your:
Knowledge about bar work and alcohol-related issues
1 2 3 4 5 6 7 8 9 10
Confidence in your own ability to deal with everyday occurrences within the job
1 2 3 4 5 6 7 8 9 10

**Example situations**

- How would you deal with a customer you believed was younger than 18 years of age?
- How would you deal with a customer buying a drink for a friend who was showing signs of glazed eyes and incoherent speech?
- Can you name any ways that may help to prevent trouble before it occurs?
- How might you explain the difference in two friends’ drunken behaviour given that they have both drunk the same drinks all evening?