

Understanding young people's alcohol-related social norms in schools in Sefton: final report

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Introduction

Alcohol abuse by British children has been identified as a public health concern (Phillips-Howard et al., 2008; BMA, 2008; Toumbourou et al., 2007). Nationally, nearly a quarter of 11 year olds have drunk alcohol and by the age of 15 years drinking is common (Fuller, 2007). However, levels of alcohol consumption vary across the country as do associated levels of harm. The North West region of England is particularly disproportionately affected (NWPHO, 2008). In the North West, a study of more than 9,000 15-16 year olds showed that one third binge drink (drinking five or more drinks per session) weekly and those doing so are five times more likely to experience violence and injury (Hughes et al., 2008). Indeed, Sefton has been identified as having high levels of hospital admission for alcohol specific conditions amongst those under 18 years of age (NWPHO, 2008).

Concerns about childhood harm from drinking focus principally on acute effects such as violence, injury, and sexual abuse (Hughes et al., 2008; Miller et al., 2007). Statistics show that long-term harm now also threatens younger age groups consequent to binge drinking from an early age: alcohol-related liver disease mortality rates have increased dramatically in 25-35 year olds in England in recent years (Thomson et al., 2008). Further, underage alcohol use can impair intellectual development, affect school attendance and performance (Phillips-Howard et al., 2008; BMA, 2008; Toumbourou et al., 2007). Experiences in later life can also be affected: drinking by the age of 12 is associated with alcohol abuse in late adolescence (Gruber et al., 1996), and binge drinking before age 15 is associated with a four-fold higher risk of dependence in adult life (Bonomo et al., 2004).

In America, campaigns aiming to tackle social norms have been identified as a way of reducing alcohol consumption amongst college students (Neighbors et al., 2007) and it may be that this can be extended to school pupils in the United Kingdom. In order to understand local social norms amongst teenagers and to effectively target a social norms campaign, Sefton Primary Care Trust (PCT) commissioned the Centre for Public Health at Liverpool John Moores University to investigate prevailing attitudes and norms in local schools and the local college via an online survey both prior to and after the campaign. The research addressed the following questions:

- What are the social norms surrounding alcohol consumption for young people in Sefton in terms of how they view their friends' and parents' consumption and perceptions?
- Can a campaign targeting social norms be effective in reducing the potential for harm?

The pre-intervention survey was conducted in schools in March and May 2009, at which stage an accompanying interim report was produced (Lightowlers et al. 2009). This final report details the survey results from the post-intervention survey in schools. The college survey is due to start in September 2009, and accompanying interim and final reports will be produced for those surveys in due course.

Methodology

Sefton PCT delivered an educational campaign in schools in South Sefton surrounding social norms and alcohol consumption aimed at those aged 14 to 18 years towards the end of the summer term in 2009. In order to maximise the potential of the messages developed and to understand the impact of the intervention, researchers at the Centre for Public Health co-ordinated surveys both before and after the intervention to examine any change in social norms associated with drinking alcohol. Pupils aged 14-

16 years were surveyed in schools in Sefton, using an online self-completion questionnaire.

Researchers designed an online questionnaire for pupils to investigate levels of alcohol consumption and their perceptions of the actions of those around them. Before commencing the research, ethical approval for the study was received from Liverpool John Moores University's ethics committee and letters were sent out to the parents of the children involved to inform them about the nature of the intended campaign and the surrounding evaluation. As children were aged under 16 years, parents who preferred their children not to be involved were able to remove their children from the survey. One school however, asked to adopt an 'opt in' approach whereby parents were asked to provide written consent for their children to participate.

Teachers administered the questionnaire to pupils in year 10 classes during normal lesson time. The teachers were provided with instructions on how to administer the questionnaire to their class, information sheets to hand out to pupils, as well as a paper-based version of the questionnaire so they could answer any queries and gauge how long the pupils would need to complete the survey.

Pre-intervention survey

Six schools (including one control school, which was not receiving the planned intervention) agreed to participate. Unfortunately, two schools, including the control school pulled out of the research project during the fieldwork. In total, four schools ran the pre-intervention survey (March - May 2009), generating an overall sample population of 302 participants (Lightowlers et al. 2009). Five participants were removed from the analysis as they had provided invalid responses to many of the questions¹. A further two suspected teacher submissions were also removed, resulting in a final interim sample size of 295². Details of key findings from the pre-intervention survey can be found in the interim report (Lightowlers et al, 2009).

Post-intervention survey

Once more, the questionnaire was administered online by teachers to their year 10 classes during their normal lesson time. As in the pre-intervention questionnaire (Lightowlers et al, 2009), the questionnaire asked pupils about their own alcohol consumption and their perceptions of the actions of those around them so that any changes in consumption or views could be established. A small number of additional questions were added to the post-intervention questionnaire asking pupils whether they had seen any of the campaign materials (see Appendix I).

Of the four schools that participated in the earlier stage of the study, only two ran the post-intervention survey (in July 2009), generating an overall sample population of 111 participants. Unfortunately two of the schools (including the originally proposed control school) did not participate in the follow up survey due to operational reasons and difficulty contacting the head teachers in question. This resulted in a smaller sample size than originally expected for as well as the loss of the control group, five

¹ Responses were deemed invalid where the pupil had seemingly not responded seriously to the questionnaire throughout such as giving values of over 99 for the number of drinks consumed in a week or giving hoax responses in free text boxes.

² Whilst every effort was made to remove invalid responses from the dataset, it is not possible to be entirely sure that test entries by teachers were successfully identified and removed or that all hoax or bogus answers were identified. Further, some respondents suggested they came from schools which did not participate in the survey, whilst it is possible that one or two of these may have been teachers, it is likely that these were chosen in error or jest.

participants were removed from the analysis as they had provided invalid responses to many of the questions, resulting in a final sample size of 106³.

The attrition in participating schools had a number of implications for the analysis strategy, not least the inability to compare pupils' responses from schools who had received the intervention with those who had not. This means that it is difficult to assess the extent to which the intervention delivered impacted on any changes in perceptions or behaviours, as these could not be compared with a control school, where the intervention was not delivered. Also, having only two schools participate in the second survey resulted in a smaller sample size than hoped for and considerably limits the extent to which findings can be said to be representative of school pupils across Sefton. A further restraint was the inability to track pupils' responses over the two time periods effectively: originally, to enable analysis of changing attitudes, a unique code was created for each pupil in order to link the pupils' pre-intervention responses with their post-intervention responses. However, in each school, teachers delivered the questionnaire only to some of their year 10 classes for pragmatic and operational reasons. Thus the same classes – and therefore pupils – were not necessarily surveyed in the two questionnaires and individuals' data cannot be linked in many cases. This is discussed in more detail below.

Data matching for longitudinal dataset

In order to track changing behaviour, alcohol consumption and perceptions of peers' drinking over time within individuals exposed to the campaign (namely from before the intervention until after the intervention), data on individuals who responded to both sweeps of the survey were merged into a single file for analysis. A subset from the two schools who participated in both first and second sweeps (N=64) was identified by matching cases on their initials, date of birth and the school they attend. This method for matching cases was adopted to preserve confidentiality and to simplify the survey's administration (it was delivered by teachers rather than researchers due to resource constraints). However, as a result, it is not possible to be entirely sure that individuals matched are indeed the same individuals but in such a small sample the chances are relatively high. This subset was reduced to 58 valid respondents once hoax responses had been removed.

The intervention

The social norms campaign was delivered by NHS Sefton in schools in Sefton during June and early July 2009. As part of this intervention a poster campaign ('Beer Goggles') was run with the posters being based on some of the findings provided in the interim report (see Appendix II for a copy of the posters displayed).

³ Once more, effort was made to correctly identify invalid and hoax responses and remove these where necessary. However, some such responses may have inadvertently been missed.

Findings

Sample characteristics

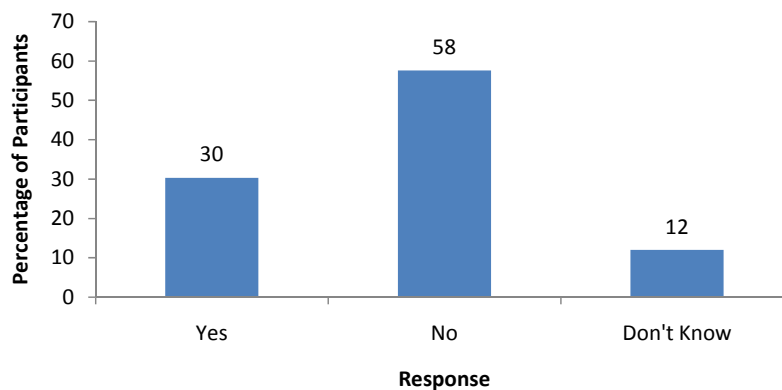
Of the 106 respondents that provided valid responses in the post-intervention survey, half were male (51.1%) and half female (48.9%). Although some students gave invalid ages (between 12 and 23) the mean age was 15 in line with the age for year 10 pupils. Just over half (57.6%) of respondents were from one school and 42.4% were from the other participating school. Because of the small numbers involved, it is not possible to provide a breakdown of ethnicity.

'Beer Goggles' poster campaign findings

Participants were asked if they had seen the 'Beer Goggles' campaign posters. Over half (58%) of participants reported that they had not seen the posters (

Figure 1). Just under a third (30%, 10 people) reported that they had seen the posters and a further 12% did not know if they had seen them. However, just 33 out of 106 participants completed this question (31%) so it is difficult to be sure of how many pupils actually saw the posters.

Figure 1: Have you seen the 'Beer Goggles' posters, N = 33



The participants were asked to record the location in which they had seen the 'Beer Goggles' posters. This question had an extremely low response rate; just 16 answers were obtained. Of this group, the most common location reported for sighting the posters was on the school notice boards or in the corridors (31% reported this, five people) where the posters were often displayed. However, others reported viewing the posters outside local shops, on stationery and on billboards as well as in the school toilets despite campaign posters not being displayed in these locations.

Participants were then requested to remark on whether, having seen the poster, they intended to change their behaviour: five out of the seven respondents who answered this question intended to keep track of how much they drink, whilst the other two did not. Numbers were too small to comment on the proportions of respondents who intended to reduce the amount that they drink with friends, who would try to not drink every weekend, or who intended to tell their parents where they were on Friday or Saturday evening (only six respondents answered these questions).

Statistical tests were performed to see whether having seen the posters or not was significantly related to pupils' average consumption or the average estimation of their

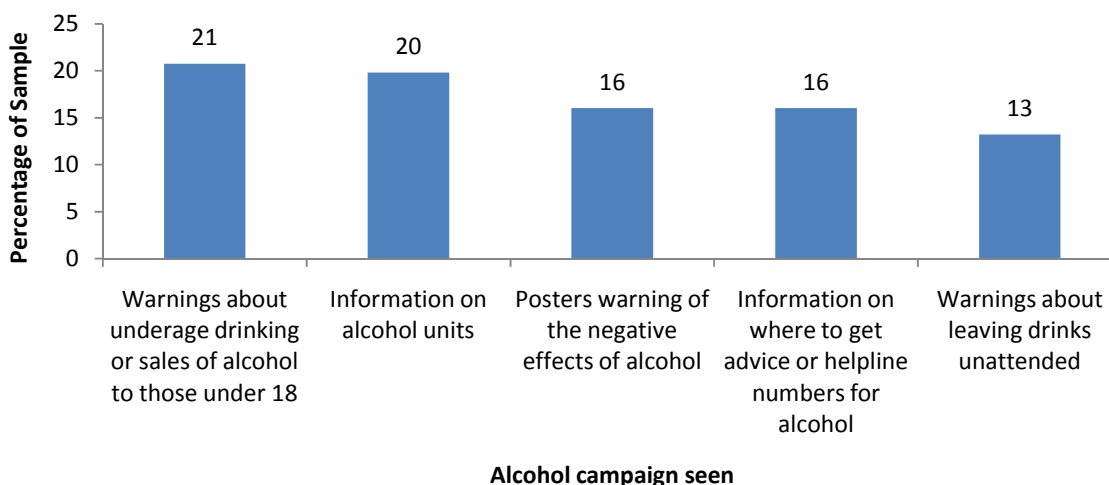
peers' drinking⁴. However, results were non-significant and thus it is not possible to conclude that seeing the posters had any effect on consumption or the perception of peers' consumption.

Finally the participants were asked to comment on what they thought of the 'Beer Goggles' posters overall. There were a few responses to this question; three were positive suggesting they were "good", "cool" or "ok"; however, a further two responses considered the posters "stupid". With only a few responses evidence remains inconclusive.

To ascertain the impact of the social norms campaign as a whole, respondents were asked additional questions about alcohol campaigns in general in order to identify whether they were aware of any other similar local or national campaigns and to ascertain whether participants were getting confused between the different campaigns being run. Here, when asked to indicate whether they had seen any other alcohol campaigns in the past month, a number of other campaigns were reported by those pupils who responded to the question (Figure 2):

- Campaigns warning about underage sales or drinking (21%, 22 people).
- Campaigns relating to information on alcohol units (20%, 21 people)
- Sixteen percent (17 people) had seen posters warning of the negative effects of alcohol.
- Sixteen percent (17 people) had seen information on where to get help or advice.
- Thirteen percent (14 people) had seen warnings about unattended drinks.

Figure 2: Proportion of participants that had seen information on alcohol



Own drinking behaviour and perceptions of, peer and adult drinking

As in the interim report (Lightowlers et al, 2009), measures of own, friends' and peers' drinking were examined in the follow up sample. These were compared with the interim findings as displayed in the tables below (Table 1) and suggest that the average consumption, as well as the perceived consumption of their peers and best friends appeared to increase marginally between the two time periods. The main

⁴ Mann-Whitney U tests were performed; p=0.889 and p=0.550 respectively.

finding from the interim and the premise of the social norms paradigm (namely that young people tend to overestimate their peers' drinking; Lightowlers et al, 2009), has continued to hold in the second survey. For the paired longitudinal sample, the means were compared by performing a Wilcoxon signed rank test to examine the significance of perceived and actual consumption means between individuals (Table 2). No statistically significant change between the two surveys was identified ($p>0.05$).

Table 1: Descriptive statistics for cross-sectional sample for both pre and post intervention survey

Number of alcoholic drinks* consumed per week	Pre-intervention survey				Post-intervention survey			
	N	Mean	Range	Standard deviation	N	Mean	Range	Standard deviation
Number consumed by participant	177	3.55	0-45	6.112	75	4.19	0-65	8.830
Perceptions of the number consumed by the average student in the participant's class	177	8.16	0-60	9.323	75	10.28	0-55	9.584
Perceptions of the number by the participant's closest friend	177	4.88	0-50	7.199	75	5.60	0-50	7.015

* For example, one drink could be a glass of wine, a bottle of beer or an alcopop.

Table 2: Descriptive statistics for paired longitudinal sample

Survey	Number of alcoholic drinks* consumed per week	N	Range	Mean	Standard Deviation	P value from Wilcoxon Signed rank test*
Pre	Own drinking	47	0-12	2.45	2.535	p=0.867
Post	Own drinking	47	0-12	2.49	2.804	
Pre	Peer drinking	50	0-25	7.56	5.775	p=0.287
Post	Peer drinking	53	0-50	9.96	9.612	
Pre	Best friends' drinking	49	0-25	3.43	4.198	p=0.118
Post	Best friends' drinking	53	0-50	5.53	7.977	

*P values greater than 0.05 signify that the average number of drinks did not significantly differ over the two time points

In the pre-intervention survey, the more that an individual drank, the more they were likely to perceive that their peers consumed ($p=0.443$, $p<0.001$)⁵. However, this relationship did not hold for the sample measured after the social norms campaign had been delivered ($p=0.194$, $p=0.096$).

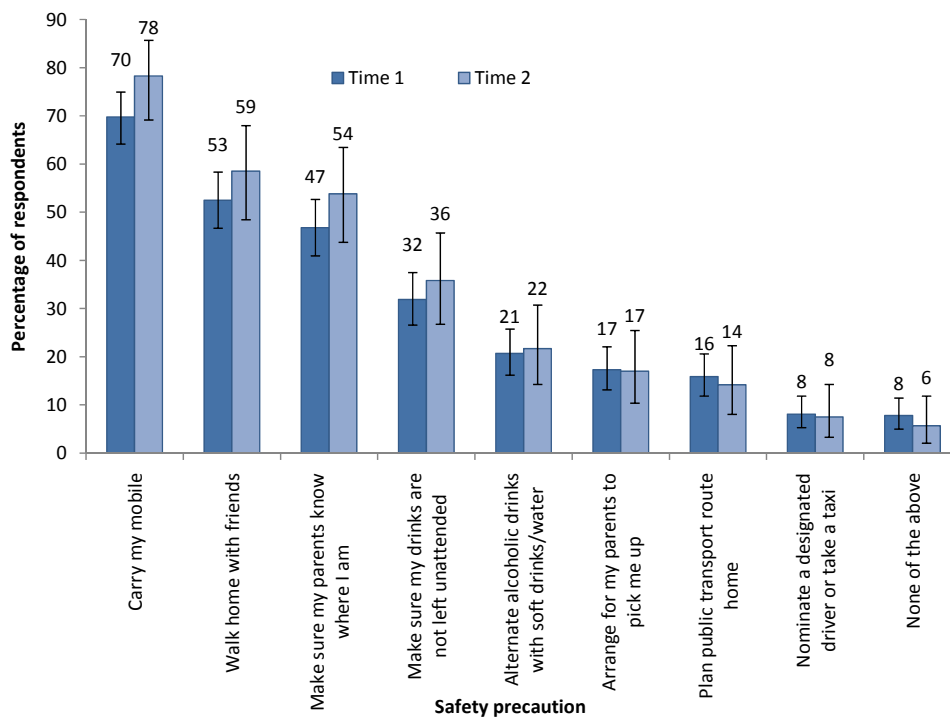
Changes since interim report

Responses obtained from the follow up survey were examined in relation to the original findings from the initial sample presented in the interim report to look for (in)

⁵ Assessed using Pearson's correlation coefficients for the relationship between own and peers' drinking. A value of $p=0.443$, $p<0.001$ signifies a significant moderate correlation in the pre-intervention survey.

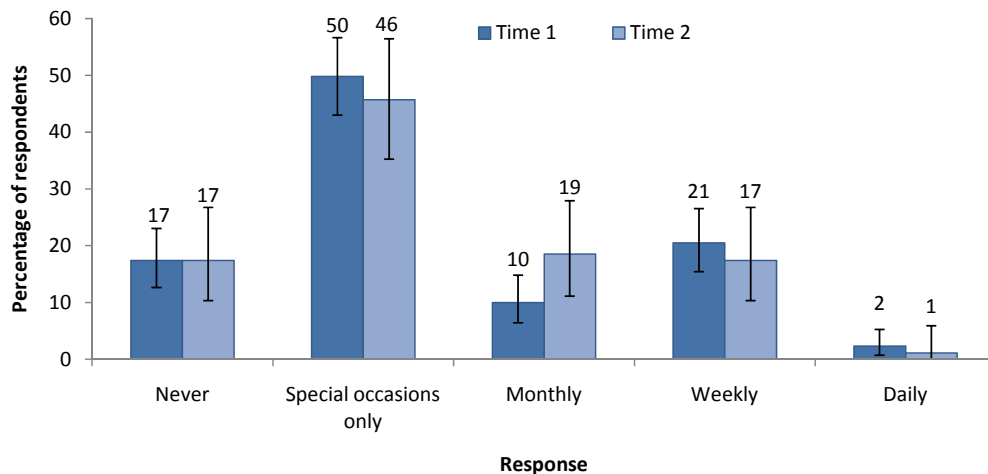
consistencies. As many findings had not differed substantially between the two samples, results will not be duplicated in this report and readers are referred to the interim report (Lightowlers et al., 2009) for overall results on the first sweep of the survey. However, a number of noteworthy observations were made between the two samples which are documented and presented in this section. Firstly, one of the campaign messages being centred around pupils making parents aware of their whereabouts on Friday and Saturday nights, there was a slight increase in the proportion of pupils who reported that they made sure their parents knew where they were in the second sweep (after the intervention) (+7%, Figure 3). However, as can be seen by the overlapping confidence intervals⁶ on Figure 3, these differences should be interpreted with caution. In the second survey, drinking on special occasions remained the most frequent drinking pattern for consumption of five or more drinks on one occasion (Figure 4). However, there seemed to be a slight shift away from special occasion drinking, and towards monthly drinking. Again, this is hard to interpret because of overlapping confidence intervals.

Figure 3: Proportion of participants that adopted safety precautions when out drinking with friends



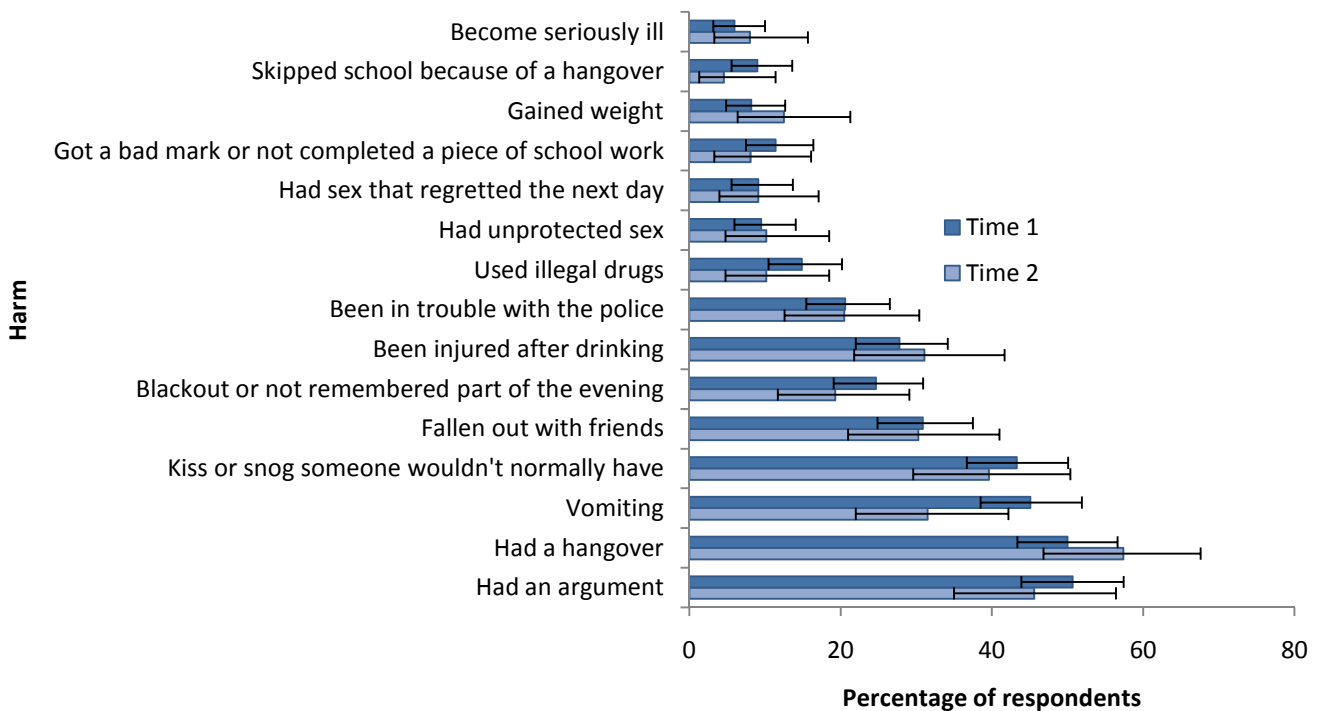
⁶ Confidence intervals are used to indicate the reliability of an estimate, and are defined as the range in which the mean lies with a given probability (the convention is to use 95% as we have here).

Figure 4: Self-reported drinking of five or more drinks on one occasion



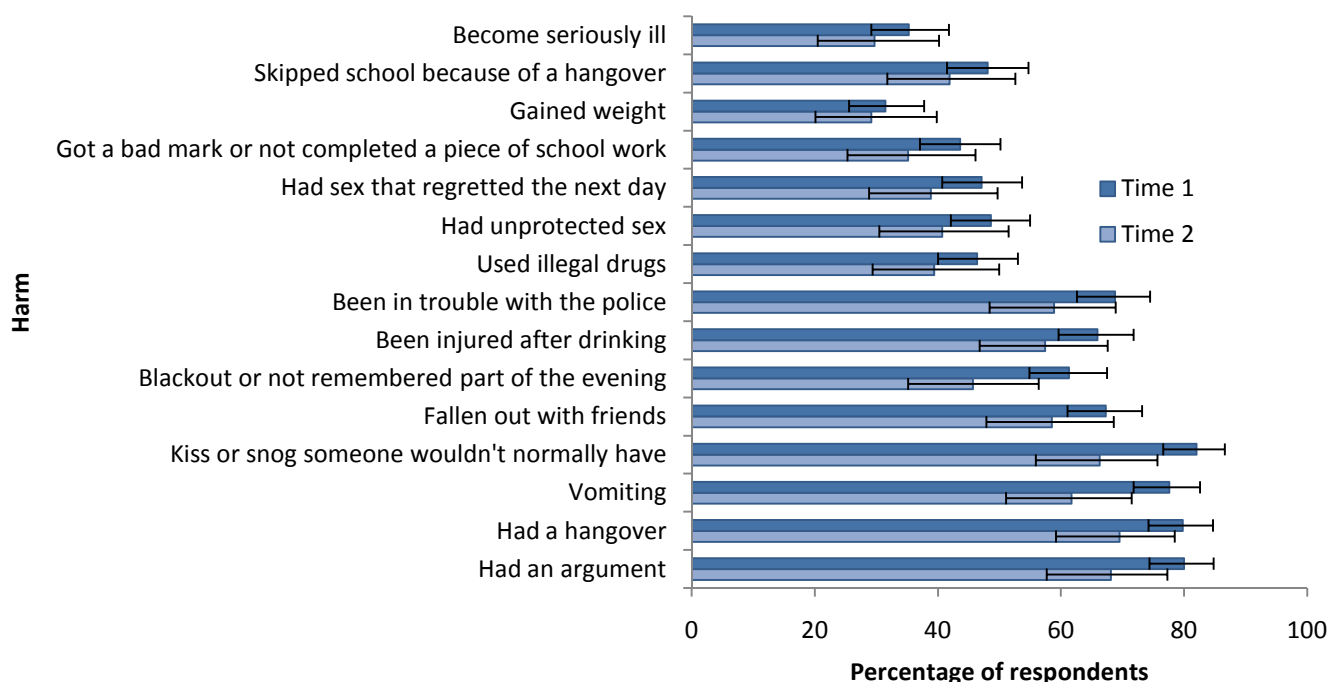
Findings also suggest a mixed picture between the two sweeps of the harms experienced by students: those experiencing a hangover saw an increase whilst those who had vomited or had arguments decreased, but again, changes were relatively small when the confidence intervals were considered (Figure 5). However, results from the second sweep suggest a consistent reduction in the pupils' perceptions of harms experienced by other people their own age across all categories, and this is especially apparent in the 'kiss someone you wouldn't normally' and 'vomited' categories (Figure 6).

Figure 5: Proportions of respondents that had experienced harms after drinking



See Appendix III for numbers relating to this figure.

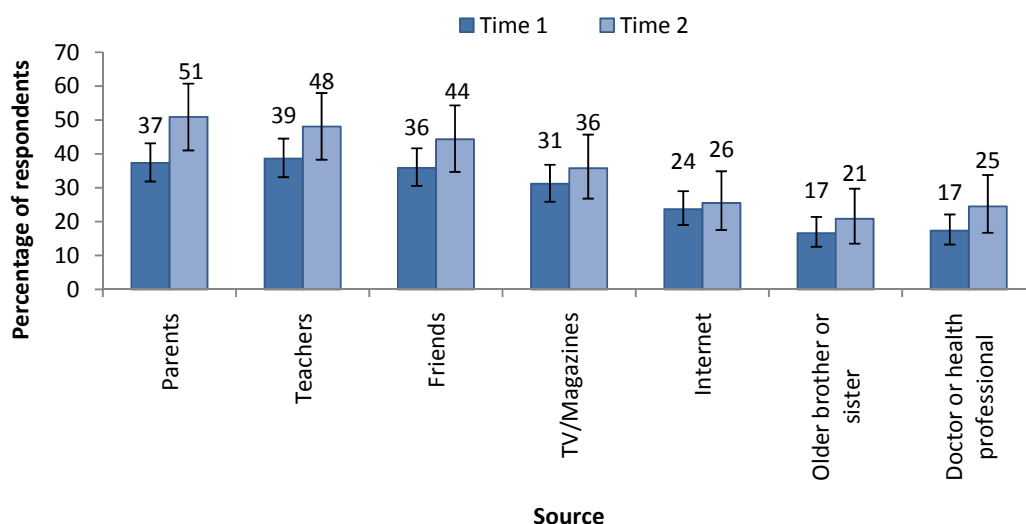
Figure 6: Proportions of respondents who perceived their peers to have experienced harms after drinking



See Appendix III for numbers relating to this figure.

In the second sweep, a larger proportion of pupils tended to report receiving information on alcohol from all sources, and, as in the first survey, parents, teachers and friends were the most likely sources of information (Figure 7).

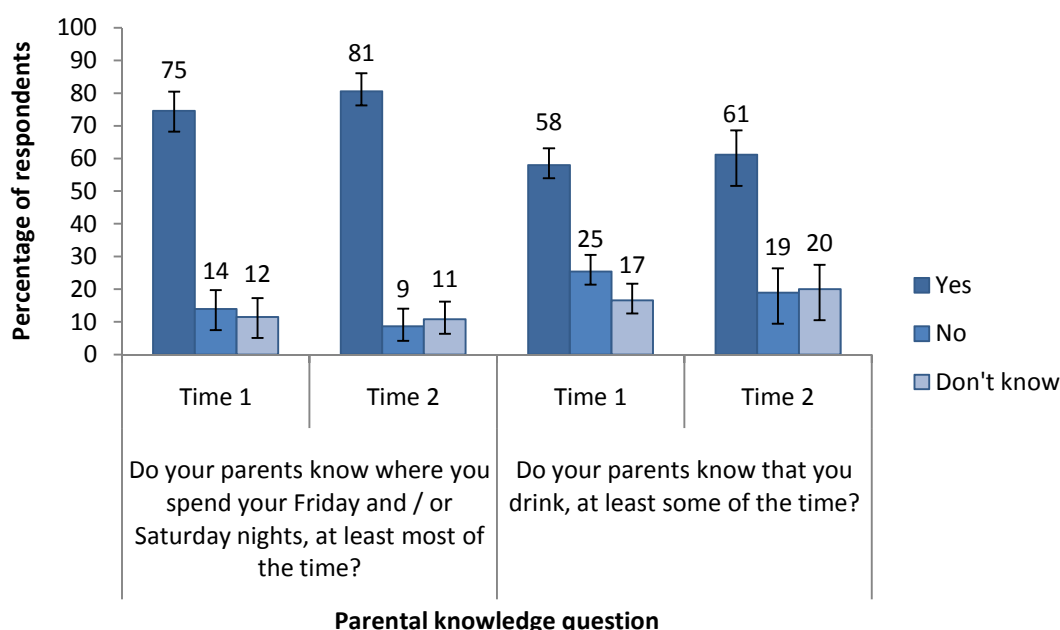
Figure 7: Proportions of respondents receiving information on alcohol by source



Marginal increases can also be seen in the proportion of respondents that suggested their parents knew of their whereabouts on a Friday and Saturday night between the first and second sweeps, as well as in the proportion of those who suggested their parents were aware of their drinking (Figure 8). Again, overlapping confidence

intervals mean that the potential differences cannot be considered statistically significant.

Figure 8: Parental knowledge of whereabouts and drinking



Discussion

Levels of own and peer consumption

Findings from both the interim (Lightowlers et al, 2009) and final reports support the general finding that young people tend to overestimate their peers' alcohol consumption compared with their actual reported drinking levels. However, the significant correlation between an individual's and their perception of their peers' drinking, which was present in the first sweep of the survey, was no longer present in the sweep run after the intervention. Although this needs to be interpreted with caution due to the small sample size, it could suggest that participants' own drinking was less strongly linked to perceptions of peer drinking following exposure to the intervention.

When comparing the mean number of units reported for participants' own consumption and estimated consumption of peers, there were no statistically significant changes identified between the two surveys. This cannot necessarily be interpreted as a failure of the intervention to reduce alcohol intake, since we are unable to ascertain what the drinking behaviour would have been in the absence of the intervention (due to the lack of a control school). In particular, because of the timing of the intervention relative to summer (pre-intervention survey took place in March to May 2009, post intervention in July 2009) we might have expected alcohol intake to increase. This is because of the known trends towards increased alcohol consumption in the warmer summer months (Cho et al, 2001). This may additionally lead towards a tendency for outdoors visible consumption, which in turn could increase perceptions of others' consumption. Moreover, an increase could be expected because of the natural increases in age and life experience over the two sweeps of adolescent respondents. This is indicated by the considerable differences seen between school year groups shown in previous research. For example, Fuller's

(2009) national survey of school pupils shows that the proportion of 14 years old reporting lifetime prevalence of alcohol consumption is 70%, compared with 81% of 15 year olds. Thus, in general and without an intervention, it could be expected for reported rates of consumption to have increased between the two survey sweeps. Instead, in this study, no significant change was seen between the two time-points. It may be possible (although this cannot be evidenced without at least one control school), that without the intervention, consumption and perceptions of consumption could have increased significantly.

Findings on the visibility of the campaign

The post intervention questionnaire aimed to establish whether respondents had seen the intervention (in the form of a poster campaign), and if so, whether they intended to change their behaviour as a result. However, a sizeable proportion of respondents did not respond to the question that sought to measure whether people had seen the poster. Of those who did, a considerable proportion (58%) had not seen the posters. This could suggest that the posters were not positioned for maximum impact, did not succeed in holding pupils' attention or the content was not sufficiently memorable. The low response rates to the questions about the campaign materials may further suggest that many respondents did not see or did not remember viewing the posters. Notwithstanding, for a small number of individuals, the posters may have led to reported intentions by participants to track their drinking habits and/or to reduce quantities consumed.

Given the lack of awareness of the campaign amongst the study population, and limited details on the impact on intended future behaviour, findings suggest the majority of students miss or do not take note of important information displayed in poster campaigns. These findings should lead to a reassessment of how and where to display health education information in schools. However, it was beyond the remit of the current study to survey actual participation of the schools in the intervention and measure, for example, whether the posters were displayed prominently; this would merit further study.

Harm and avoidance of harm before and after the intervention

The surveys also attempted to measure harms experienced by participants and participants' perceptions of harm experienced by others. The small sample sizes led to difficulty in interpreting changes in harm-related variables between the two sweeps. The perceived levels of harms experienced by peers as a result of alcohol consumption appeared to slightly reduce between the two sweeps. There was also a tendency for a higher proportion of pupils to obtain information about alcohol from sources such as friends, family and teachers in the second sweep. Finally, a slightly higher proportion of pupils said they made sure their parents knew of their whereabouts on a Friday or Saturday night as a safety precaution and in general – a message emphasised in one of the campaign posters. However, caution is needed in interpreting these results because of the small sample size and correspondingly large error margins.

Factors influencing success of social norms campaigns in other studies

Social norms interventions in the United States of America have used a range of methods such as providing individually tailored feedback on individual consumption patterns; risks and normative comparisons; targeting interventions to vulnerable or sub-groups such as those deemed to have alcohol problems; first-year students; athletes or particular members of an academic class (although there did not appear

to be any evidence that gender specific interventions were more effective than general social norms interventions); as well as delivering more generally targeted electronic and/or print media campaigns on normative drinking patterns (see Moreira et al., 2009). Such interventions were reviewed and findings suggest “that individual and personalised normative interventions over the immediate and medium term appear to reduce alcohol use, misuse and related problems amongst university or college students” and that “the use of social norms interventions should also be considered for use and study in other settings since they have the potential to be a very cost-effective intervention for reducing alcohol use and related harms.” (Moreira et al., 2009:39). Furthermore, other successful school-based initiatives for young people have often incorporated a range of interactive and skills-based activities to engage young people successfully – for example, delivering alcohol life skills training or curriculum booster sessions on smoking, drinking and drug use and interactive skills-based lessons on identifying alcohol-related harm and developing harm reduction strategies delivered by both parents and teachers – which have successfully reduced alcohol consumption, particularly heavy alcohol consumption in the short and medium term (see Elliott et al., 2009).

A more comprehensive analysis of the social norms intervention in Sefton would incorporate measures of the translation of the intervention into the school/college setting, such as the nature of the activities ran as part of interventions (for example, posters), the duration and intensity of the activities ran (for example, length for which posters were displayed and number of posters displayed). This would enable an evaluation of the processes employed as well as the outcomes of the intervention.

Limitations

Factors beyond our control led to a high dropout rate of schools in the second sweep. This reduced the power of the study to detect statistically significant differences in behaviour and perceptions over the two time periods. The loss of the control school meant that we could not measure changes in alcohol behaviour in a comparable population in the absence of the intervention. Such changes may have been expected over time as adolescents are in a transition towards more adult behaviours, and also, because people in general drink more over the summer (Cho et al., 2001). This limited the analyses that could be performed and the certainty with which conclusions could be drawn. With a larger sample size, further analysis may have been possible on subgroups such as those who had seen the poster campaign and those who had not. This would have enabled differences in their characteristics, alcohol consumption or other responses to be examined. For example, only a total of 30 people had seen the poster campaign and the number of responses dropped to as low as 16 when asked where they had seen it. Indeed, subgroup analysis may have enabled other interesting avenues to be explored, such as whether abstainers, moderate or high drinkers differed in their responses or reactions to the campaign. This could have identified areas in which the social norms campaign could be further developed and the kinds of changes that it may bring about or achieve. Further, given an adequate sample size, results may have been broken down by gender and school.

As mentioned, the study experienced a considerable drop in school participation compared that originally anticipated. These schools had originally fully consented to participate when the project was first devised and it was only when researchers sought to instigate the studies that problems began to arise. With hindsight, researchers should have sought to strengthen this agreement through personal meetings but resources were limited, and because the schools had agreed to

participate through the project commissioners, no problems in participation were anticipated.

Another limitation is that we were not able to ascertain to what extent the intervention was deployed in individual schools. The assumption was that posters were prominently displayed.

Conclusions and recommendations

Many of the findings obtained from this study are somewhat ambiguous in light of the unfortunate methodological limitations and problems encountered. In light of these, however, a number of lessons have been learned for future survey delivery. One key step to ensure the future success of such surveys is to have sufficient commitment from the schools if they are to deliver the survey to their pupils. This will minimise attrition and ensure higher school response rates. In hindsight, visiting the schools in person to brief them about the project and trial the online questionnaire with the teachers may have been a useful strategy to adopt in order to alert them to the importance of delivering the questionnaire at both stages and in order to facilitate a personal relationship with the teachers. This extra level of input needs to be built in when commissioning the evaluation. The results of this study demonstrate the importance of incorporating suitable control measures in order to assess changes and allow these to be attributed to the intervention. Following on from this, in the second part of the project, where the initiative will be rolled out in one local college, face to face contact has been made with the staff administering the survey in the college to foster a supportive personal relationship with the lead researcher (this is achievable with current resources since only one study site is involved, where a large number of people can be accessed simultaneously). Thus the issues identified in this initial piece of research can be resolved in order to facilitate a more seamless roll out of the next stage of the research.

Nonetheless, interesting observations and findings were gleaned from the research presented in this report and are useful in further developing campaigns and initiatives to tackle underage drinking and social norms. In particular, overestimation of peers' drinking was present in our sample, suggesting that work around targeting social norms may be beneficial. There was some suggestion that further enhanced initiatives could be beneficial, since higher proportions of pupils were making sure their parents knew of their whereabouts and obtaining information about alcohol from sources such as friends, family and teachers in the second sweep. There was also a reduction between the two sweeps in the perceived levels of harms experienced by their peers as a result of alcohol consumption.

However, many findings were inconclusive and could not be directly attributed to the campaign. In light of the limited evidence available to demonstrate the impact of the poster campaign, it is recommended that such campaigns be reinforced with supplementary activities to engage young people and to emphasise the branding of any such campaign. These activities should be monitored as part of the evaluation. Should additional activities be implemented and developed in the future, suitable outcome measures for evaluating their impact must be designed and developed to evaluate their impact and/or success in the future.

References

- Baillie, R. (1996). Determining the Effects of Media Portrayals of Alcohol: Going Beyond Short Term Influence. *Alcohol and Alcoholism* 31(3):235-242.
- Bellis MA, Hughes K, Korf D et al. (2005). Violence in general places of entertainment. *Drugs and alcohol: violence and insecurity?* Strasbourg: Pompidou Centre of the Council for Europe: 57-96.
- BMA (2008). *Alcohol misuse: tackling the UK epidemic*. London: BMA Board of Science.
- Bisset S., Markham, W. and Aveyard P., (2007). School culture as an influencing factor on youth substance use. *J Epidemiol Community Health* 2007; 61:485–490.
- Bonomo YA, Bowes G, Coffey C, Carlin JB, Patton GC. (2004). Teenage drinking and the onset of alcohol dependence: a cohort study over seven years. *Addiction* 99(12):1520-8.
- Borsari B. and Carey K.B. (2001). Peer influences on college drinking: A review of the research, *Journal of Substance Abuse* 13: 391–424
- Cho YI, Johnson TP, Fendrich M (2001). Monthly variations in self-reports of alcohol consumption. *J Studies Alcohol*. 62(2):268.
- Elliott G, Morleo M. and Cook PA. (2009). *Identifying effective interventions for preventing underage alcohol consumption*. Centre for Public Health, Liverpool John Moores University.
- Fuller E. (2007). *Drug use, smoking and drinking among young people in England in 2006*. London: National Centre for Social Research and National Foundation for Educational Research.
- Fuller E. (2009). *Smoking, drinking and drug use among young people in England in 2008*. London: National Centre for Social Research and National Foundation for Educational Research.
- Gruber E, DiClemente RJ, Anderson MM, Lodico M. (1996). Early drinking onset and its association with alcohol use and problem behavior in late adolescence. *Prev Me*: 25(3):293-300.
- Hansen, A. and Gunter B. (2007). *Constructing Discourse on Alcohol Issues: Towards a Framework for Analysis*. *Alcohol and Alcoholism* 42(2): 150-157.
- Hughes S, Bellis M, Hughes K. (2008). *Risky drinking in North West school children and its consequences: a study of fifteen and sixteen year olds*. Liverpool: Centre for Public Health, Liverpool John Moores University.
- Lightowlers, C. Morleo, M. Harkins, C. (2009). *Understanding young people's alcohol-related social norms in Sefton*. Interim report. Liverpool: Centre for Public Health, Liverpool John Moores University.
- Lo, C.C. (1995). Gender Differences in collegiate alcohol abuse. *Journal of drug issues* 25: 817-836.

- Margo J (2008). *Make me a criminal: preventing youth crime*. London: Institute for Public Policy Research.
- May, C. (1992) A burning issue? Adolescent alcohol use in Britain 1970-1991. *Alcohol and Alcoholism* 27: 109-115
- McVeigh C, Hughes K, Bellis MA et al. (2005). *Violent Britain: People, prevention and public health*. Centre for Public Health, Liverpool John Moores University.
- Measham, F. (2006). The new policy mix: Alcohol, harm minimisation, and determined drunkenness in contemporary society. *International Journal of Drug Policy* 17: 258–268.
- Miller JW, Naimi TS, Brewer RD, Jones SE. (2007). Binge drinking and associated health risk behaviors among high school students. *Pediatrics*;119(1):76-85.
- Moreira, MT, Smith LA and Foxcroft D (2009) *Social norms interventions to reduce alcohol misuse in University or College students (Review)*. The Cochrane Collaboration. JohnWiley & Sons, Ltd.
- Neighbors, C. Lee C., Lewis M., Fossos N. and Larimer M. (2007). Are Social Norms the Best Predictor of Outcomes Among Heavy-Drinking College Students? *J Stud Alcohol Drugs*; 68(4): 556-565.
- North West Public Health Observatory (NWPHO) (2008). *Local Alcohol Profiles for England*. NWPHO, Centre for Public Health, Liverpool John Moores University. <http://www.nwph.net/alcohol/lape/>.
- O'Farrell A, Allwright S, Toomey D, Bedford D, Conlon K. (2007). Hospital admission for acute pancreatitis in the Irish population, 1997-2004: could the increase be due to an increase in alcohol-related pancreatitis? *J Public Health (Oxf)*; 29(4):398-404.
- Parker, H., & Williams, L. (2003). Intoxicated weekends: Young adults' work hard-play hard lifestyles, public health and public disorder. *Drugs: Education, Prevention and Policy*, 10, 345–367.
- Perkins, W. H. (2007) Misperceptions of peer drinking norms in Canada: Another look at the “reign of error” and its consequences among college students. *Addictive Behaviours* 32(11) 2645-2656
- Phillips-Howard P, Morleo M, Cook P, Bellis M. (2008). *Alcohol availability to underage drinkers: Fact Sheet Two*. Centre for Public Health, Liverpool John Moores University.
- Plant, M. and P. Miller (2007). *Being 'Taught to Drink' UK Teenagers' Experience*. *Youth Drinking Cultures: European Experiences*. M. Järvinen and R. Room. Hampshire, Ashgate Publishing Ltd.: 131-143.
- Roche, A. M., P. T. Bywood, et al. (2007). *Young People and Alcohol: The role of cultural influences*. Adelaide, Flinders University of South Australia.
- Thomson SJ, Westlake S, Rahman TM, Cowan ML, Majeed A, Maxwell JD, et al. (2008). Chronic Liver Disease--An Increasing Problem: A Study of Hospital Admission and Mortality Rates in England, 1979-2005, with Particular Reference to Alcoholic Liver Disease. *Alcohol Alcohol*.

Toumbourou JW, Stockwell T, Neighbors C, Marlatt GA, Sturge J, Rehm J. (2007). Interventions to reduce harm associated with adolescent substance use. *Lancet*: 369(9570):1391-401.

World Health Organization (WHO) (2006). *Interpersonal violence and alcohol*, World Health Organization.

Appendix I – Post intervention questionnaire

1. Individual code

This questionnaire is confidential so we do not ask you to write down your name. We will need to match the questionnaires you fill in before and after the study to look at changes over time. For this, we ask if you can please help us by completing the following three questions.

* 1. What is the first letter of your first name?

Please write in box below.

* 2. What is the first letter of your surname?

Please write in box below.

* 3. What is the date of your birthday?

Please write in box below.

For example, if your birthday was on the 12th May, you would enter 12.

* 4. Have you ever had an alcoholic drink - a whole drink, not just a sip?

Please tick only one box.

Yes

No

2. Questions about drinking

5. What are your main reasons for not drinking?

Please tick all that apply from the list below.

- I do not like the taste
- My parents do not drink
- I do not like how it feels after drinking alcohol
- I am worried about the health risks
- My parents do not let me
- For religious reasons or because of my faith
- I have seen other people have bad experiences when they are drunk
- I am worried about what my parents would say

Other (please specify)

3. Questions about drinking

6. How old were you when you had your first alcoholic drink?

Please write your age in years in the box below.

Please give your best guess if you do not know.

7. In general, where do you drink?

Please tick all that apply from the list below.

- At home (when parents are in)
- At home (when parents are out)
- In friends house (when their parents are in)
- In friends house (when their parents are out)
- At parties with friends or family
- Pubs, nightclubs, discos
- Sports or members clubs
- Outside (street / parks / shops)

Other (please specify)

4. Questions about drinking

8. Who do you mostly drink alcohol with?
Please tick only one box from the list below.

- Parents
- Friends
- Older brothers or sisters
- Other adults
- On my own

9. In general, where do you get your alcohol from?
Please tick all that apply from the list below.

- I buy my alcohol from pubs/nightclubs
- I buy alcohol myself from off licences
- I buy alcohol myself from supermarkets
- Parents/guardians buy/give it to me
- I take it from my parents/guardians without asking them
- Friends/family over 18 buy/give it to me
- I get adults outside shops to buy it for me

Other (please specify)

10. Do you do any of the following to keep safe when you are drinking with your friends?

Please tick all that apply from the list below.

- Carry my mobile
- Make sure drinks are not left unattended
- Walk home with my friends
- Make sure my parents know where I am
- Alternate alcoholic drinks with soft drinks/water
- Plan public transport route home
- Nominate a designated driver or take a taxi
- Arrange for parents to pick me up
- None of the above

Other (please specify)

5. Questions about drinking

11. Do you think it is usual for people of your age to have had any of the following happen to them after drinking?

Please answer either yes or no for each of the events listed below.

	Yes	No
Be injured after drinking	<input type="checkbox"/>	<input type="checkbox"/>
Be in trouble with the police	<input type="checkbox"/>	<input type="checkbox"/>
Use illegal drugs	<input type="checkbox"/>	<input type="checkbox"/>
Kiss or snog someone they wouldn't have normally	<input type="checkbox"/>	<input type="checkbox"/>
Have a hangover	<input type="checkbox"/>	<input type="checkbox"/>
Skip school because of a hangover	<input type="checkbox"/>	<input type="checkbox"/>
Vomiting	<input type="checkbox"/>	<input type="checkbox"/>
Blackout or not remember part of the evening	<input type="checkbox"/>	<input type="checkbox"/>
Have sex they regret the next day	<input type="checkbox"/>	<input type="checkbox"/>
Have unprotected sex	<input type="checkbox"/>	<input type="checkbox"/>
Gain weight	<input type="checkbox"/>	<input type="checkbox"/>
Become seriously ill	<input type="checkbox"/>	<input type="checkbox"/>
Had an argument	<input type="checkbox"/>	<input type="checkbox"/>
Fallen out with friends	<input type="checkbox"/>	<input type="checkbox"/>
Got a bad mark or not completed a piece of school work	<input type="checkbox"/>	<input type="checkbox"/>

12. How many alcoholic drinks do you consume during a typical week?

For example, one drink could be a glass of wine, a bottle of beer or an alcopop.

Please write number in the box below.

13. Have you ever felt you didn't want to drink alcohol but had to because of pressure from friends who wanted you to drink?

Please tick either yes or no.

Yes

No

6. Questions about drinking

14. Have you yourself EVER had any of the following happen to you after drinking alcohol?

Please answer either yes or no for each of the events listed below.

	Yes	No
Had a hangover	<input type="checkbox"/>	<input type="checkbox"/>
Been injured after drinking	<input type="checkbox"/>	<input type="checkbox"/>
Been in trouble with the police	<input type="checkbox"/>	<input type="checkbox"/>
Used illegal drugs	<input type="checkbox"/>	<input type="checkbox"/>
Kissed or snogged someone you would not normally	<input type="checkbox"/>	<input type="checkbox"/>
Skipped school because of a hangover	<input type="checkbox"/>	<input type="checkbox"/>
Vomited	<input type="checkbox"/>	<input type="checkbox"/>
Blackout or not remembered part of the evening	<input type="checkbox"/>	<input type="checkbox"/>
Had sex you regretted the next day	<input type="checkbox"/>	<input type="checkbox"/>
Had unprotected sex	<input type="checkbox"/>	<input type="checkbox"/>
Gained weight	<input type="checkbox"/>	<input type="checkbox"/>
Became seriously ill	<input type="checkbox"/>	<input type="checkbox"/>
Had an argument	<input type="checkbox"/>	<input type="checkbox"/>
Fallen out with friends	<input type="checkbox"/>	<input type="checkbox"/>
Got a bad mark or not completed a piece of schoolwork	<input type="checkbox"/>	<input type="checkbox"/>

7. Questions about drinking

15. Why do you drink?

Please answer either yes or no for each of the statements listed below.

	Yes	No
I drink because I like the feeling	<input type="checkbox"/>	<input type="checkbox"/>
I drink because its exciting	<input type="checkbox"/>	<input type="checkbox"/>
I drink because I feel more confident or sure of myself	<input type="checkbox"/>	<input type="checkbox"/>
I drink to get high	<input type="checkbox"/>	<input type="checkbox"/>
I drink to cheer myself up when I'm in a bad mood	<input type="checkbox"/>	<input type="checkbox"/>
I drink so I don't feel left out	<input type="checkbox"/>	<input type="checkbox"/>
I drink because it's fun	<input type="checkbox"/>	<input type="checkbox"/>
I drink to forget my worries	<input type="checkbox"/>	<input type="checkbox"/>
I drink because my friends pressure me to drink	<input type="checkbox"/>	<input type="checkbox"/>
I drink because I want to be liked	<input type="checkbox"/>	<input type="checkbox"/>
I drink because it helps me to enjoy a party	<input type="checkbox"/>	<input type="checkbox"/>
I drink to celebrate a special occasion with friends	<input type="checkbox"/>	<input type="checkbox"/>
I drink to be sociable	<input type="checkbox"/>	<input type="checkbox"/>
I drink to fit in with the group	<input type="checkbox"/>	<input type="checkbox"/>

8. Questions about drinking

16. How often do you, your friends and your parents drink?

Please tick only one of the options below for each person / group.

	Never	Special occasions only	Monthly	Weekly	Daily
You	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your mother (or carer)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your father (or carer)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. How often do you, your friends and your parents drink five or more alcoholic drinks on one occasion?

Please tick only one of the options below for each person / group.

	Never	Special occasions only	Monthly	Weekly	Daily
You	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your mother (or carer)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your father (or carer)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. Do you think it is OK for you to do the following?

Please answer either yes or no for each of the statements listed below.

	Yes	No
Get drunk once in a while	<input type="checkbox"/>	<input type="checkbox"/>
Drink alcohol every weekend	<input type="checkbox"/>	<input type="checkbox"/>
Drink alcohol every day	<input type="checkbox"/>	<input type="checkbox"/>
Drive a car after drinking alcohol, providing you were old enough to drive	<input type="checkbox"/>	<input type="checkbox"/>
Drink enough alcohol to pass out	<input type="checkbox"/>	<input type="checkbox"/>

9. Questions about drinking

19. In general, do you think it is OK for people to do the following?

Please tick as many as apply for each group listed below.

	People your age	Adults
Get drunk once in a while	<input type="checkbox"/>	<input type="checkbox"/>
Drink alcohol every weekend	<input type="checkbox"/>	<input type="checkbox"/>
Drink alcohol every day	<input type="checkbox"/>	<input type="checkbox"/>
Drive a car after drinking alcohol, providing they are old enough to drive	<input type="checkbox"/>	<input type="checkbox"/>
Drink enough to pass out	<input type="checkbox"/>	<input type="checkbox"/>

20. How many alcoholic drinks do you think are consumed by the average student in your class during a typical week?

Please write number in the box below.

21. How many alcoholic drinks do you think are consumed by your closest/best friend during a typical week?

Please write number in the box below.

22. How many students in your class drink alcohol at least once a week or more?

Please tick only one option from the list below.

None

Some

Half

Most

All

10. Questions about drinking

23. In which of the following situations is it acceptable to be drunk?

Please answer tick all that apply for each statements listed below.

	For someone your age	For an adult
At a party	<input type="checkbox"/>	<input type="checkbox"/>
At home alone watching the TV	<input type="checkbox"/>	<input type="checkbox"/>
At home over a meal with a family	<input type="checkbox"/>	<input type="checkbox"/>
With friends in the park or public place	<input type="checkbox"/>	<input type="checkbox"/>
In pubs and nightclubs	<input type="checkbox"/>	<input type="checkbox"/>
At a friend's house	<input type="checkbox"/>	<input type="checkbox"/>
On special occasions (such as birthdays, Christmas, new year etc.)	<input type="checkbox"/>	<input type="checkbox"/>
Sporting events (such as a football match)	<input type="checkbox"/>	<input type="checkbox"/>
On holiday	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

11. Questions about drinking

24. How often do you see advertisements for alcohol?

Please tick only one answer for each of the following.

	Never	Sometimes	A lot
Television	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Newspapers/magazines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<input type="text"/>		

25. Do you agree with the following?

Please tick one answer for each of the following.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Alcohol advertisements make young people drink more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Celebrities who drink alcohol make young people drink more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Learning about alcohol

26. Where do you generally get your information about alcohol from?

Please tick all that apply from the list below.

- Parents
- Teachers
- Friends
- Older brother or sister
- Internet
- Doctor or other health professional
- TV/Magazines

Other (please specify)

27. Do your parents know where you spend your Friday and/or Saturday nights, at least most of the time?

Please select only one of the options below.

Yes

No

Don't know

28. Do your parents know that you drink, at least some of the time?

Please tick only one option below.

Yes

No

Don't know

13. Learning about alcohol

29. How do your parents/guardians feel about you drinking alcohol?

Please select only one of the options from the list below.

- They don't like me drinking alcohol at all
- They don't mind as long as I don't drink too much
- They let me drink as much as I like
- Don't know

14. Learning about alcohol

30. How would your parents feel if they knew about your drinking?

Please select only one of the options from the list below.

- They wouldn't like me drinking alcohol at all
- They wouldn't mind as long as I don't drink too much
- They would let me drink as much as I like
- Don't know

15. Alcohol campaigns

31. Over the past month have you seen any of the following?

Please tick as many as apply.

- Posters warning of the negative effects of alcohol
- Information on where to get advice or helpline numbers for alcohol
- Information on alcohol units
- Warnings about leaving drinks unattended
- Warnings about underage drinking or sales of alcohol to those under 18

Other (please specify)

32. Over the past month have you seen the 'beer goggles' posters?

These may have been about drinking by pupils in your school and/or other pupils telling parents where they are on a Friday and Saturday night?

Please tick only one box.

Yes

No

Don't know

16. Beer goggle poster questions

33. Please tell us where you have seen the 'beer goggles' posters?

Please tick as many as apply.

- School toilets
- Bill boards
- On stationery
- School notice boards or in corridors
- Outside local shops

Other (please specify)

34. Having seen the 'beer goggles' posters, do you intend to change your behaviour in any of the following ways?

Please tick as many as apply.

	Yes	No	No change
Try to watch how much you drink	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduce the amount you drink when drinking with friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Try to not drink every weekend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tell your parents where you are on Friday and Saturday evenings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

35. Overall, what did you think think of the 'beer goggles' posters?

17. About you

* 36. How old are you?

Please write age in years in the box below.

* 37. Are you...

Please tick only one of the options below.

Male

Female

38. Please indicate which school/college you attend.

Please tick only one of the options below.

Savio Salesian College

Bootle High

St George of England High

St Michael's High

St Wilfrid's

Hillside High

39. What is your full postcode?

Please write postcode in the box below, for example L3 2AY.

This will not be used to identify you or send you anything.

If you do not know it all, please write as much as you can.

18. About you

40. Are you...

Please tick only one of the options below.

White British

White European

White Irish

Mixed Race

Black / Black British

Chinese / Chinese British

Other (please specify)

41. How would you describe your religion?

Please tick only one of the options below.

Christian

Muslim

Hindu

Jewish

None

Other (please specify)

Appendix II – Beer googles posters

70%

**OF YOUNG PEOPLE
IN YOUR SCHOOL**

**LET THEIR
PARENTS
KNOW**

**WHERE THEY ARE
ON A FRIDAY
& SATURDAY
NIGHT**

TAKE OFF THE

**BEER
GOGGLES**

AND SEE WHATS REALLY GOING ON

70%

**OF YOUNG PEOPLE
IN YOUR SCHOOL**

**LET THEIR
PARENTS
KNOW**

**WHERE THEY ARE
ON A FRIDAY
& SATURDAY
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TAKE OFF THE

**BEER
GOGGLES**

AND SEE WHATS REALLY GOING ON

70%
**OF YOUNG
PEOPLE IN
YOUR SCHOOL
DRINK
LESS
THAN 3
ALCOHOLIC
DRINKS
PER
WEEK**

**TAKE OFF THE
BEER
GOGGLES**

AND SEE WHATS REALLY GOING ON

70%
**OF YOUNG
PEOPLE IN
YOUR SCHOOL
DRINK
LESS
THAN 3
ALCOHOLIC
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**TAKE OFF THE
BEER
GOGGLES**

AND SEE WHATS REALLY GOING ON

70%
**OF YOUNG
PEOPLE IN
YOUR SCHOOL
CHOOSE
NOT TO
DRINK
EVERY
WEEKEND**

**TAKE OFF THE
BEER
GOGGLES**
AND SEE WHATS REALLY GOING ON

70%
**OF YOUNG
PEOPLE IN
YOUR SCHOOL
CHOOSE
NOT TO
DRINK
EVERY
WEEKEND**

**TAKE OFF THE
BEER
GOGGLES**
AND SEE WHATS REALLY GOING ON

Appendix III – Figures for own and peer harms

Percentage of respondents that had experienced harms after drinking

Harms	Pre intervention	Post intervention
Had an argument	50.7	45.6
Had a hangover	50.0	57.4
Vomiting	45.1	31.5
Kiss or snog someone wouldn't normally have	43.3	39.6
Fallen out with friends	30.9	30.3
Blackout or not remembered part of the evening	24.7	19.3
Been injured after drinking	27.8	31.1
Been in trouble with the police	20.6	20.5
Used illegal drugs	14.9	10.2
Had unprotected sex	9.5	10.2
Had sex that regretted the next day	9.1	9.1
Got a bad mark or not completed a piece of school work	11.4	8.1
Gained weight	8.2	12.5
Skipped school because of a hangover	9.0	4.6
Become seriously ill	6.0	8.0

Percentage of respondents who perceived their peers to have experienced harms after drinking

Harms	Pre intervention	Post intervention
Had an argument	80.0	68.1
Had a hangover	79.8	69.5
Vomiting	77.6	61.7
Kiss or snog someone wouldn't normally have	82.0	66.3
Fallen out with friends	67.3	58.5
Blackout or not remembered part of the evening	61.3	45.7
Been injured after drinking	65.9	57.4
Been in trouble with the police	68.8	58.9
Used illegal drugs	46.4	39.4
Had unprotected sex	48.6	40.7
Had sex that regretted the next day	47.1	38.9
Got a bad mark or not completed a piece of school work	43.6	35.2
Gained weight	31.5	29.2
Skipped school because of a hangover	48.1	41.9
Become seriously ill	35.3	29.7