National
Social Marketing
Centre

REDUCING

UNDERAGE KERBSIDE

BINGE DRINKING

National Learning Demonstration Site Scheme

National Social Marketing Centre

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Reducing underage kerbside binge drinking







Sub21 is a social marketing project, which aims to decrease the prevalence of kerbside drinking in 13-17 year olds in the target areas of Wallsend, Howdon and Battle Hill in North Tyneside. The intervention consists of two main components: a proxy and illegal sales campaign which centres on a voluntary alcohol sales ban to under 21s and a programme of enhanced youth activities.

To assess progress made by the intervention in reaching its objectives, young people aged 13-17 years attending two schools in the target area were surveyed before and after the intervention was launched. The first survey took place in April 2009 (n=208), the second took place six month later in October 2009 (n=147). We measured self-reported behaviour with regard to drinking and purchasing alcohol (including street drinking and proxy purchases) and prevalence of negative consequences associated with alcohol consumption. We defined binge drinking as drinking alcohol at least once in the last month and feeling "very drunk" at least once during that time.

In the four weeks prior to interview:

- Female respondents were more likely than male respondents to report binge drinking (71.1% and 47.1% respectively). Post intervention, the proportion of female respondents reporting binge drinking fell from 71.1% to 60.5%, though this reduction was not statistically significant.
- The most commonly reported negative consequences of drinking alcohol were being in an argument or fight (reported by 17.6% of male, and 21.7% of female respondents) and vomiting (reported by 13.7% of male and 39.7% of female respondents). Post intervention there was a striking reduction in the proportion of female respondents reporting being sick through alcohol (from 39.7% pre to 14.0% post, p=0.003).
- Kerb side drinking was reported more frequently by female than male respondents (28.2% and 15.7% respectively). Post intervention, the proportion of female respondents reporting drinking on the street was half that of the pre intervention level (from 28% pre to 14% post, and nears statistical significance, p=0.075).
- A similar pattern is seen with drinking in the park and other outdoor locations (15.4% among female respondents pre intervention and 4.7% post intervention, again the difference nears statistical significance, p=0.077). However, female respondents were significantly more likely to report drinking at home post intervention (39% pre and 65% post p=0.008).
- Pre intervention, 21.7% of respondents reporting buying alcohol in a shop and 15.5% in an off licence. Female respondents were more likely than male respondents to report buying alcohol from all sources. There was a reduction in the proportion of female respondents reporting buying alcohol in off licences from 19.2% pre to 7.5% post, a difference which nears statistical significance, p=0.093)
- Post intervention, participants were significantly more likely not to have asked anyone to buy alcohol for them. Of those who did ask someone to buy alcohol for them, both male and female respondents most commonly reported asking a friend; there was a significant decrease in the proportion doing so post intervention (31% pre down to 18.8% post, p=0.050)

background

In June 2007, the Department of Health and the Home Office jointly launched an updated government alcohol strategy "Safe. Sensible. Social. The next steps in the National Alcohol Strategy" in which they set out their intentions to promote sensible drinking and reduce the harm that alcohol can cause. Young people under 18 who drink alcohol are one of three priority groups identified in the strategy.

Recently published findings from the 2007
European School Survey Project on Alcohol and other Drugs (ESPAD), point to high levels of alcohol consumption among young people in the UK. Of the 35 European countries taking part in the survey, the UK had the third highest level of binge drinking and was one of the few countries where girls drank more than boys. Teenagers in the UK were also found to be more likely than those in nearly all other countries to report that they expected positive consequences from drinking.



In April 2007, the National Learning Demonstration Site Scheme was set up by the National Social Marketing Centre (NSMC). The Scheme, funded by the Department of Health (DH), aimed to:

- Stimulate the use and integration of social marketing approaches into existing local programmes and strategies;
- Increase understanding and development of skills at the local level in using and applying social marketing concepts and approaches;
- Test out and contribute to the further development of the NSMC's practical resources and tools on social marketing;
- To capture learning and promote best practice; and
- To develop an evidence-base for social marketing in England.

Ten sites were selected, based in Primary Care Trusts (PCTs) and Local Authorities (LAs) across the country, with each project looking at a different topic area and/or target audience. Following discussions between North Tyneside's Alcohol Harm Reduction Strategy Group and the National Social Marketing Centre (NSMC), North Tyneside became one of the NSMC's ten learning demonstration sites in early 2007.







The sub21 intervention

The aim of the intervention was to decrease the prevalence of kerbside drinking in 13-17 years olds in the target areas of Wallsend, Howdon and Battle Hill in North Tyneside. The intervention consisted of two main components: a proxy and illegal sales campaign which centred on a voluntary alcohol sales ban to under 21s and a programme of enhanced youth activities. The programme of activities was developed in consultation with the target audience. Most of the activities took place in Wallsend Boys Club and were offered on Thursday, Friday and Saturday nights.

In addition to football, which was already well established at the club, activities included;

- Graffiti
- Bike workshop and ramp building
- **■** Skateboarding
- BMX skills
- Street dance
- Cookery and BBQ skills
- **■** Film making
- Nail art
- **■** Cyberchaos (i.e. computer gaming)
- **■** Bodyfit

Full details of this project are featured on the National Social Marketing Centre's website, http://www.nsmcentre.org.uk/showcase-case-studies.html

evaluation methodology





Here we report on one element of the evaluation which focuses on the behavioural outcomes of the project. A process evaluation was also conducted, which explored factors enhancing and hindering implementation of the project.

Aim: To assess progress made by the intervention in reaching its objective to decrease the prevalence of kerbside drinking among 13-17 year olds in the target area.

Design: 'Pre' and 'post' survey.

Sample: Pupils in years 9 to 11 (and year 12 in the post survey) attending two local schools.

Data collection: Fully structured and scheduled questionnaire (with the exception of one or two open ended questions) administered by school staff and completed on school premises. The questionnaire items reflected the aims and objectives of the intervention, and so (in addition to classificatory information on gender, age, ethnicity and post code), included questions on self-reported behaviour with regard to drinking and purchasing alcohol (including street drinking and proxy purchases) and prevalence of negative consequences associated with alcohol consumption.

We defined binge drinking as drinking alcohol at least once in the last month and feeling "very drunk" at least once during that time (this definition has been used elsewhere ref: Matthews S. et al. (2006) Underage drinking: findings from the 2004 Offending, Crime and Justice Survey. Home Office Research Findings No. 277)

In addition, the questionnaire probed activities enjoyed by respondents in their spare time and attendance at organised youth activities. The 'post' survey measured a number of intervention impact indictors such as recognition of the 'Sub 21' brand and awareness of and attendance at enhanced youth services.

The questionnaire was piloted in one class in December 2008.

findings



The pre intervention survey was carried out in April 2009 before the launch of the intervention. 208 completed questionnaires were returned (of these one had been defaced and was excluded from the analysis).

The post intervention survey was carried out in October 2009. 147 completed questionnaires were returned. The four week recall period for both surveys included "regular" term time (i.e. did not include any holidays).

Demographic profile of respondents

The average age of respondents was similar in both surveys (14.8 years in the pre intervention survey and 14.5 years in the post). The majority of respondents were white British (95.2% pre and 95.9% post). A slightly higher proportion of female than male respondents completed the pre intervention questionnaire (55.1% and 44.9%, respectively). Equal proportions completed post intervention questionnaire (Table 1).

Table 1: Demographic profile of respondents

Demographic	Pre intervention	า		Post interve	ention	
	Male	Female	All	Male	Female	All
Sex %	44.9	55.1	100	50.3	49.7	100
(n/N)	(93/207)	(114/207)	(207/207)	(74/147)	(73/147)	(147/147)
Average age	14.9	14.8	14.8	14.6	14.4	14.5
Min, max	13, 16	13, 16	13, 16	12, 17	13, 17	12, 17
Ethnic group White British % (n/N) Other % (n/N)	95.7	94.7	95.2	94.7	97.3	95.9
	(89/93)	(108/114)	(197/207)	(71/75)	(71/73)	(142/148)
	4.3	5.3	4.8	5.3	2.7	4.1
	(4/93)	(6/114)	(10/207)	(4/75)	(2/73)	(6/148)
Base: all respondents with non-missing values						



Prevalence of drinking alcohol

All participants were asked if they had ever had an alcoholic drink (a whole drink and not just a sip), and, if so, when they last did.

Drinking alcohol was a near universal experience with 91.5% of respondents at baseline reporting that they had drunk alcohol at some point in their lives (Table 2). Post intervention fewer male participants reported ever having had a drink compared to pre intervention (77.1% and 87.8% respectively). Analysis related to intervention objectives is limited to those reporting drinking in last 4 weeks.

A high proportion of respondents (62.3% at baseline) reported drinking alcohol in the last month. Female respondents were more likely to report having drunk in the last month than their male counterparts (69.4% and 54.8% respectively at baseline). There was little difference in the proportions reporting drinking the last four weeks pre and post intervention.

Table 2: Self reported drinking, proportion % (n/N)

	Pre interver	Pre intervention			Post intervention		
	Male	Female	All	Male	Female	All	
Ever had a drink	87.8 (79/90)	94.5 (103/109)	91.5 (182/199)	77.1 (54/70) <i>P=0.075</i>	95.8 (68/71) P=0.700	86.5 (122/141) P=0.145	
Had drink in last 4 weeks	54.8 (51/93)	68.4 78/114)	62.3 (129/207)	59.5 (44/74) <i>P=0.863</i>	66.2 (43/65) P=0.410	59.6 (87/146) P=0.773	
Base: all respondents w	vith non-missing	values					



Consequences of drinking alcohol

Those who reported drinking in the last month were then asked a series of questions regarding their experiences of drinking alcohol.

Of those who had drunk alcohol in the last four weeks, female respondents were more likely than male respondents to report having drunk so much alcohol that they felt "really drunk" i.e. binge drinking (Table 3).

Pre intervention, 71.1% of females reported binge drinking in the previous four weeks compared to 47.1% of males. Post intervention, a lower proportion of female respondents reported binge drinking in last four weeks than did pre intervention (60.5% post compared with 71.1% pre) though this reduction was not statistically significant (p=0.237). The most commonly reported negative consequences of drinking

alcohol among male respondents were being in an argument or fight and vomiting. Pre intervention, 17.6% of male participants - who had drunk alcohol in the last four weeks - reported they had had an argument or fight due to alcohol during that time and 13.7% reported they had vomited. There was little difference in the reporting of these outcomes among male respondents pre and post intervention (Table 3).

Being in an argument or fight and vomiting were also the most commonly reported negative consequences for female respondents but transposed. Pre intervention, nearly 40% of female participants reported being sick due to alcohol in the previous four weeks and 24.4% reporting being in an argument or fight. Post intervention, there was a striking reduction in proportion of female respondents reporting being sick through alcohol in previous four week (39.7% pre and 14.0% post, p=0.003).

Table 3 Consequences of drinking alcohol %(n/N)

	Pre interventi	on		Post intervent	Post intervention		
	Male	Female	All	Male	Female	All	
Experienced being "really drunk" at least once	47.1 (24/51)	71.1 (54/76)	61.4 (78/127)	45.2 (19/42) p=0.861	60.5 (26/43) p=0.237	52.9 (45/85) p=0.220	
Due to drinking alcohol:							
Had argument/fight	17.6 (9/51)	24.4 (19/78)	21.7 (28/129)	19.0 (8/42) P=0.862	16.3 (7/43) P=0.300	17.6 (15/85) P=0.468	
Visited A&E	3.9 (2/51)	3.8 (3/78)	3.9 (5/129)	2.4 (1/42) P=0.676	0 (0) P=0.193	1.2 (1/85) P=0.242	
Admitted to hospital	2.0 (1/51)	1.3 (1/78)	1.6 (2/129)	0 (0) P=0.362	0 (0) P=0.456	0 (0) P=0.249	
Saw doctor for injury	2.0 (1/51)	2.6 (2/78)	2.3 (3/129)	2.4 (1/42) P=0.889	2.3 (1/43) P=0.936	2.4 (2/85) P=0.990	
Had day off school	9.8 (5/51)	6.4 (5/78)	7.8 (10/129)	7.1 (3/42) P=0.649	9.3 (4/43) P=0.562	8.2 (7/85) P=0.898	
Vomited	13.7 (7/51)	39.7 (31/78)	29.5 (38/129)	16.7 (7/42) P=0.693	14.0 (6/43) P=0.003*	15.3 (13/85) P=0.017*	
Had unsafe sex	5.9 (3/51)	3.8 (3/78)	4.7 (6/129)	9.5 (4/42) P=0.508	0 (0) P=0.193	4.7 (4/85) P=0.985	
Tried drug	7.8 (4/51)	10.3 (8/78)	9.3 (12/129)	4.8 (2/42) P=0.547	0 (0) P=0.030*	2.4 (2/85) P=0.044*	

Base: those reporting drinking alcohol in last month and non-missing values

^{*}significant difference between pre and post at the 95% confidence level



Where alcohol is consumed

Overall, the most commonly reported location for drinking alcohol (pre and post) was in the home; either the respondent's or "someone else's". This was followed by "at a party" (Table 4).

Pre intervention, just under a quarter of respondents (23.3%) reported drinking on the street during the last four weeks; post intervention the proportion was 15.3% (though this is not a statistically significant difference, p=0.115). Pre intervention, kerb side drinking was reported more frequently by females than males (28.2% and 15.7% respectively). Post intervention, the proportion of female respondents reporting drinking on the street was half that of pre intervention [14% compared to 28%, a difference which nears statistical significance, p=0.075)

A similar pattern is seen with drinking in the park and other outdoor locations among female respondents (reported by 15.4% pre intervention and 4.7% post intervention, again the difference nears statistical significance, p=0.077). However, female respondents were significantly more likely to report drinking at home post intervention (39% pre up to 65% post p=0.008). Street drinking is known to be associated with anti social behaviour and crime, hence the reduction in drinking in outdoor locations, taken with the reduction in binge drinking and vomiting point to an increase in less harmful drinking among female respondents in this sample.

Fewer respondents reported drinking in licensed premises, though more than one in ten respondents reported drinking a pub or bar. There was little difference in reporting of these outcomes between the two surveys.

Table 4 Locations for drinking alcohol % (n/N)

	Pre intervention			Post interven	Post intervention		
	Male	Female	All	Male	Female	All	
Have drunk alcohol in:							
Pub or bar	11.8 (6/51)	11.5 (9/78)	11.6 (15/129)	9.5 (4/42) P=0.728	16.3 (7/43) P=0.461	12.9 (11/85) P=0.774	
Club or disco	0 (0)	6.4 (5/78)	3.9 (5/129)	7.1 (3/42) P=0.052	11.6 (5/43) P=0.318	9.4 (8/85) P=0.097	
At party	33.3 (17/51)	46.2 (36/78)	41.1 (53/129)	31.0 (13/42) P=0.807	39.5 (17/43) P=0.482	35.3 (30/85)) P=0.395	
At own home	43.1 (22/51)	39.7 (31/78)	41.1 (53/129)	38.1 (16/42) P=0.623	65.1 (28/43) P=0.008*	51.8 (44/85) P=0.125	
At someone else's home	37.3 (19/51)	55.1 (43/78)	48.1 (62/129)	35.7 (15/42) P=0.302	44.2 (19/43) P=0.249	40.0 (34/85) P=0.115	
On the street	15.7 (8/30)	28.2 (22/78)	23.3 (30/129)	16.7 (7/42) P=0.304	14.0 (6/43) P=0.075	15.3 (13/85) P=0.155	
In park/other outdoor	7.8 (4/51)	15.4 (12/78)	12.4 (16/129)	11.9 (5/42) P=0.510	4.7 (2/43) P=0.077	8.2 (7/85) P=0.335	
Other	3.9 (2/51)	1.3 (1/78)	2.3 (3/129)	9.5 (4/42)	2.3 (1/43)	5.9 (5/85)	
				P=0.169	P=0.667	P=0.091	

Base: those reporting drinking alcohol in last month and non-missing values *significant difference between pre and post at the 95% confidence level



Obtaining alcohol

In terms of purchasing alcohol, the most commonly reported experience was the respondent having somebody buy it for them (Table 5). Among male respondents, there was an increase in the proportion reporting having someone buy alcohol for them from 25.5% pre intervention to 35.0% post intervention. One possible explanation for this rise is that young men in the area are finding it harder to buy alcohol themselves so are exploiting other routes, though the rise is not statistically significant. So called "proxy purchases" are explored further on page 12 (Table 7).

Many participants did report purchasing alcohol themselves during the previous four weeks; pre intervention 21.7% of respondents reported buying alcohol in a shop and 15.5% in an off licence.

Female respondents were more likely than male respondents to report buying alcohol from all sources.

There was a reduction in the proportion of female respondents reporting buying alcohol in off licences from 19.2% pre to 7.5% post, a difference which nears statistical significance, p=0.093).

There was little difference between the pre and post intervention surveys in the proportion of young people purchasing alcohol from a supermarket, or from licensed premises.

Table 5 Alcohol purchases % (n/N)

	Pre intervention			Post intervention		
	Male	Female	All	Male	Female	All
Bought alcohol						
from:						
Pub or bar	5.9 (3/51)	10.3 (8/78)	8.5 (11/129)	12.5 (5/40)	10.0 (4/40)	11.2 (9/80)
				P=0.269	P=0.965	P=0.515
Club or disco	2.0 (1/51)	5.1 (4/78)	3.9 (5/129)	5.0 (2/40)	5.0 (2/40)	5.0 (4/80)
Club of disco	2.0 (1/31)	3.1 (4/78)	3.9 (3/129)	P=0.420	P=0.976	P=0.697
				. 020	. 0.570	. 0.037
Off licence	9.8 (5/51)	19.2 (15/78)	15.5 (20/129)	15.0 (6/40)	7.5 (3/40)	11.2 (9/80)
				P=0.450	P=0.093	P=0.387
Shop	17.6 (9/51)	24.4 (19/78)	21.7 (28/129)	10.0 (4/40)	17.5 (7/40)	13.8 (11/80)
				P=0.301	P=0.395	P=0.151
Supermarket	2.0 (1/51)	7.7 (6/78)	5.4 (7/129)	5.0 (2/40)	10 (4/40)	7.5 (6/80)
Supermarket	2.0 (1/31)	7.7 (0,70)	3.1 (7, 123)	P=0.420	P=0.670	P=0.546
Friend/relative	11.8 (6/51)	23.1 (18/78)	18.6 (24/129)	15.0 (6/40)	27.5 (11/40)	21.2 (17/80)
				P=0.651	P=0.597	P=0.640
C	E 0 (2 /E4)	10.2 (0/70)	0 5 (44 (420)	7.5 (2 (40)	E 0 (2 (40)	C 2 (F (00)
Someone else	5.9 (3/51)	10.3 (8/78)	8.5 (11/129)	7.5 (3/40) P=0.758	5.0 (2/40) P=0.332	6.2 (5/80) P=0.547
Bought by				r-U./38	r-0.532	P-0.347
someone else	25.5 (13/51)	38.5 (30/78)	33.3 (43/129)	35.0 (14/40)	37.5 (15/40)	36.2 (29/40)
	- (-,,	- (, -,	- (- ,)		, , ,	
				P=0.324	P=0.919	P=0.666

Base: those reporting drinking alcohol in last month and non-missing values



Concentrating on shop purchases, respondents were asked if they had been refused alcohol in the last four weeks and if so how many times. Over half of those who reported drinking in the last month said they hadn't tried to buy alcohol themselves in a shop (Table 6). Of the remainder, very few reported being refused alcohol and there was little difference between pre and post intervention.

Table 6 Shop refusals

	Pre interventi	on		Post intervention				
	Male	Female	All	Male	Female	All		
Not tried to buy	62.0 (31/50)	52.7 (39/74)	56.5 (70/124)	61.5 (24/39)	52.6 (20/38)	57.1 (44/77)		
Not refused	36.0 (18/50)	32.4 (24/74)	33.9 (42/124)	25.6 (10/39)	44.7 (17/38)	35.1 (27/77)		
Refused (once or more)	2.0 (1/50)	14.9 (11/74)	9.7 (12/124)	12.8 (5/39)	2.6 (1/38)	7.8 (6/77)		
Base: those repo	Base: those reporting drinking alcohol in last month and non-missing values							

Turning to proxy sales, respondents were asked if they had asked anyone else to buy alcohol for them during the last four week. Post intervention, participants were significantly more likely not to have asked anyone (Table 7). Of those, who did ask someone to buy alcohol for them both male and female respondents most commonly reported asking a friend and there was a significant

decrease in the proportion (31% pre intervention down to 18.8% post intervention, p=0.050)
A notable proportion (15.4% of female and 9.8% of male respondents), reported asking a stranger to buy alcohol for them in the last month, there was little difference in the proportions doing so post intervention.

Table 7 Proxy sales

	Pre intervention	า		Post intervent	ion	
Asked:	Male	Female	All	Male	Female	All
No none	54.9 (28/51)	33.3 (26/78)	41.9 (54/129)	63.4 (26/41) P=0.410	51.3 (20/39) P=0.061	57.5 (46/80) P=0.028
a friend	19.6 (10/51)	38.5 (30/78)	31.0 (40/129)	14.6 (6/41) P=0.532	23.1 (9/39) P=0.096	18.8 (15/80) P=0.050
a sibling	9.8 (5/51)	16.7 (13/78)	14.0 (18/129)	12.2 (5/41) P=0.714	7.7 (3/39) P=0.183	10.0 (8/80) P=0.400
a stranger	9.8 (5/51)	15.4 (12/78)	13.2 (17/129)	9.8 (4/41) P=0.994	10.3 (4/39) P=0.447	10.0 (8/80) P=0.491
someone else	17.6 (9/51)	17.9 (14/78)	17.8 (23/129)	12.2 (5/41) P=0.469	12.8 (5/39) P=0.478	12.5 (10/80) P=0.304
Base: those rep	orting drinking al	cohol in last mont	th and non-missing	g values		



Attitudes towards drinking

There was a significant reduction in the proportion of female respondents who agreed that alcohol "makes you feel more confident which is good", from 45.5% pre to 28.6% post (p=0.022). Post intervention, fewer female participants also agreed that they "enjoy getting really drunk" (26.8% pre compared with 18.6% post) though this reduction was not statistically significant.

Among male respondents, there was a significant reduction in the proportion agreeing that alcohol "is easy to get around here, even if you are underage".

Pre intervention 14% agreed with this statement, post intervention none of them did (p=0.001). Post intervention, more male participants agreed that alcohol "can get people into trouble so it's not really worth it" from 18.3% pre to 27.1% post, though this increase was not a significant increase (p=0.177) (Table 8).

Table 8 Attitudes towards drinking % (n/N)

	Pre interv	ention		Post interv	ention	
	Male	Female	All	Male	Female	All
It makes you feel more confident which is good	20.4 (19/93)	45.5 (51/112)	34.1 (70/205)	28.6 (20/70) P=0.228	28.6 (20/70) P=0.022*	28.6 (40/140) P=0.275
It can get people into trouble so it's not really worth it	18.3 (17/93)	22.3 (25/112)	20.5 (42/205)	27.1 (19/70) P=0.177	25.7 (18/70) P=0.600	26.4 (37/140) P=0.197
It makes you popular with your friends	6.5 (6/93)	8.0 (9/112)	7.3 (15/205)	10.0 (7/70) P=0.408	7.1 (5/70) P=0.826	8.6 (12/140) P=0.670
It is easy to get around here, even if you are underage	14.0 (13/93)	15.2 (17/112)	14.6 (30/205)	0 (0/70) P=0.001*	15.7 (11/70) P=0.922	7.9 (11/140) P=0.056
It can make you feel sick sometimes	24.7 (23/93)	32.1 (36/112)	28.8 (59/205)	17.1 (12/70) P=0.243	31.4 (22/70) P=0.920	24.3 (34/140) P=0.356
It is something that shows you're not a young kid anymore	4.3 (4/93)	8.9 (10/112)	6.8 (14/205)	7.1 (5/70) P=0.432	11.4 (8/70) P=0.583	9.3 (13/140) P=0.404
It is not worth the hassle of having to get it	10.8 (10/93)	10.7 (12/112)	10.7 (22/205)	8.6 (6/70) P=0.643	12.9 (9/70) P=0.660	10.7 (15/140) P=0.996
It's a waste of time because you can be doing more interesting things	29.0 (27/93)	24.1 (27/112)	26.3 (54/205)	17.1 (12/70) P=0.078	22.9 (16/70) P=0.847	20.0 (28/140) P=0.174
l enjoy getting really drunk	19.4 (18/93)	26.8 (30/112)	23.4 (48/205)	24.3 (17/70) P=0.448	18.6 (13/70) P=0.204	21.4 (30/140) P=0.665
Base: All respondents with non	e missing va	ılues				



Awareness of sub21

Awareness of the intervention in this sample was high; 82.5% of respondents indicated that they had heard of Sub21 (Table 9). Of those who had heard of Sub21, school assembly was the most commonly reported source, reported by 86.9% of respondents.

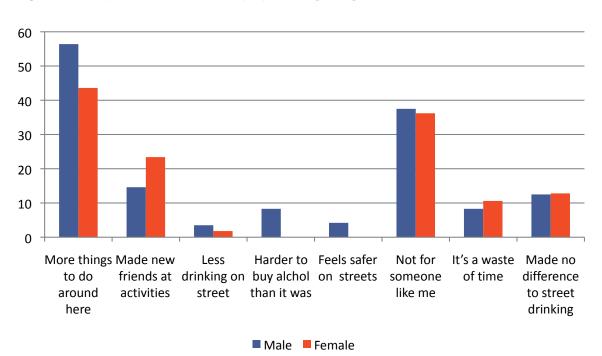
Over half the sample agreed that there were "more things to around here now", though a third indicated that the project was "not for someone like me" (Figure 1).

A third of the sample (36.5% of male and 30.9% of female respondents) had attended Sub21 activities (Table 9).

Table 9 Sub 21, post intervention % (n/N)

	Male	Female	All							
Heard of SUB21										
Yes	79.1 (53/67)	85.9 (55/64)	82.4 (108/131)							
No	9.2 (8/67)	6.2 (4/64)	9.2 (12/131)							
Not asked	9.0 (6/67)	7.8 (5/64)	8.4 (11/131)							
Where heard of SUB21										
School assembly	90.4 (47/52)	83.6 (46/55)	86.9 (93/107)							
Sub21 Website	9.6 (5/52)	7.3 (4/55)	8.4 (9/107)							
Friends	26.9 (14/52)	14.5 (8/55)	20.6 (22/107)							
Posters	21.2 (11/52)	32.7 (1855)	27.1 (29/107)							
Attended activities	36.5 (19/52)	30.9 (17/55)	33.6 (36/107)							
Base: All respondents with none m	nissing values		Base: All respondents with none missing values							

Figure 1 Participants views on SUB21, proportion agreeing



"...efforts to raise awareness of Sub21, and generate engagement with it, have been very effective; most young people surveyed had heard of the project and a third reported attending Sub21 activities."

Limitations

Chief among considerations when interpreting the findings presented here, is whether the changes observed between the pre and post surveys are indeed real changes in behaviour (and not artefact) and if so whether they can be attributed to the intervention (and not other events or activities taking place locally, regionally or nationally). Testing whether differences are statistically significant provides greater certainty that these are real changes in behaviour. Attributing these differences to the intervention, in the absence of a control group, is more challenging. However, there are some intriguing patterns in these data; changes observed were greater for female respondents than for male; variables most closely linked to the intervention activities changed the most; and variables not linked to intervention activities (such as drinking and purchasing alcohol in pubs and clubs) are similar in both surveys – all of which give us greater confidence to say that the changes observed are as a result of Sub21 intervention activities.

These data are based on self-reported behaviour and so are liable to biases associated with recall and veracity. Respondents may have been less likely to report more negative events, and more likely to report positive ones or 'socially desirable' behaviour. What is considered as socially desirable, however, is context specific and in this sample of young people could, conversely, result in over reporting of behaviour perceived to be associated with enhanced 'street credibility'. The recall period, however, was short (for most questions respondents were asked to think back over the last four weeks) and the findings are broadly in line with those of other surveys (e.g. ESPAD).

Three secondary schools serve the target area and time constraints only permitted us to survey pupils in two of these. The two schools included are both co-educational and we have assumed that the pupils surveyed are broadly representative of young people in the area.

The two surveys took place six months apart and calendar events and seasonal changes may have influenced behaviour. The two recall periods, however, included four 'normal' term time weeks i.e. they did not include any holidays or exams. It is possible that changes in the weather might have driven would be street drinkers indoors. Regional weather summaries from the Met Office show that the average temperature for the North East of England in April 2009 and October 2009 were similar (8.9C and 10.4C respectively). October 2009 was wetter than April 2009 with 11.9 days of rain ≥1mm compared to 5.7 (http://www.metoffice.gov.uk/climate/uk/2009/).

Summary

The findings presented here indicate that efforts to raise awareness of Sub21, and generate engagement with it, have been very effective; most young people surveyed had heard of the project and a third reported attending Sub21 activities.

The findings also point to some significant changes in attitudes and behaviour among young people in the area. Though no overall reduction in the prevalence of drinking in the last month can be seen, the results point to a reduction in the most harmful types of drinking among female respondents, including binge drinking, drinking to the point of being sick, and drinking on the street or at other outdoor locations. Among male participants there doesn't seem to have been much change in behaviour, but the findings suggest that they are experiencing greater difficulty in accessing alcohol in the area.