EVIDENCE TABLES

A review of the effectiveness and cost effectiveness of personal, social and health education in secondary schools focusing on sex and relationships and alcohol education for young people aged 11 to 19 years

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Alcohol: Classroom based, alcohol specific

Study details	Intervention and population details	Analyses	Results
Bagnall (1990) CBA - **Objective:** To present the effectiveness of a school-based education package. **Setting:** School **Country:** UK **Funding source:** Alcohol Education and Research Council, and the Brewers Society, with additional funding from the Scotch Whisky Association.	**Intervention details** **Name**: Alcohol Education Package **Focus/aim**: Increase alcohol knowledge and skills to make responsible decisions about alcohol **Programme type**: Social influence programme **Theoretical base**: Social influences **Key components**: Group work and optional role play exercises **Providers/delivers**: Teachers, (1) used seconded specialist teachers ('specialist' intervention group), (2) used teachers based at the school ('naive' intervention group) **Length**: 4 or 5 social education sessions **Duration**: 4hrs **Intensity**: NR **Other details**: Teachers in the 'naive' intervention group received a 30 minute briefing on the programme **Comparator**: No intervention **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1,560 **Intervention**: NR **Comparator**: NR **Male**: NR **Mean age (range)**: 12-13 year olds **Ethnicity**: NR **Baseline drinking behaviours**: 96% of participants had tasted alcohol; 10% reported maximum consumption of more than 4 pints of beer or its equivalent; 20% had experienced a hangover; 30% had an alcohol-related stomach upset.	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANOVA **Unit of allocation:** Organisation/ institution (9 Schools) **Unit of analysis:** School **Time to follow-up**: Post-test at 10 months **Other details:** Compared across school and intervention **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: NR **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**: NR	**Knowledge and understanding** There was no difference between groups on the knowledge scores. Reanalysis with the exclusion of one school (probability of contamination), showed that the intervention group had significantly greater scores on two knowledge items. **Attitudes and values** There was no difference between the two intervention groups and the control group in terms of positive or negative attitudes towards alcohol at post-test. **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** Pupils from the control groups were significantly more likely to have drunk alcohol in the last 7 days. The impact of the intervention did not differ between the 'naïve' and 'specialist' intervention groups. Behavioural measures (control; specialist intervention; naïve intervention) Ever had a hangover: 20.8; 18.1; 14.8 Alcohol-induced stomach upset: 16.1; 13.7; 13.4 Maximum consumption of >3 units alcohol: 45.6; 36.8; 38.9 Alcohol consumed within last 7 days: 31.3*; 20.7; 24.6 Increased frequency of consumption: 56.0; 50.4; 53.4 *p<0.05

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Baumann (2006) RCT (cluster) - **Objective:** To examine Project SAAV, a school-based prevention programme that focused on high-school students' freedom of choice and abilities to change problem behaviours such as dating violence and alcohol use. **Setting:** School, **Country:** USA **Funding source:** NIH, NIAAA	**Intervention details** **Name**: Project SAAV (Stopping Adolescent Alcohol Use and Dating Violence) **Focus/aim**: Alcohol and dating violence **Programme type**: motivational, educational, coping skills training **Theoretical base**: problem-behaviour theory, self-regulation theory, transtheoretical model of change **Key components**: information and discussion, coping skills, 3 homework assignments **Providers/delivers**: Teachers, **Length**: 3 sessions **Duration**: 50 minutes **Intensity**: consecutive 3-day period **Other details**: **Comparator**: No intervention **Population details** **Inclusion**: Attendance at all 3 sessions. **Exclusion**: **Total** n= 256 (62% of eligible sample) **Intervention**, n= 144 **Comparator**, n= 112 **Male** n (%) = 54% **Mean age (range)**: 16.91 (0.92) years **Ethnicity**: 93% White, 2% African American, 1% Hispanic, 1% Asian, 3% 'other' **Baseline drinking behaviours**: 80% reported ever drinking and 47% reported drinking alcohol in the previous 90 days. Frequency of current drinking %, girls, boys A few times: 22, 19.6 Once per month: 6.8, 12.3 2-3 days per month: 10.2, 7.2 Once per week: 1.7, 6.5	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Repeated measures MANOVA and ANOVA **Unit of allocation:** Group (by classes) **Unit of analysis:** Individual **Time to follow-up**: 3 months **Other details:** Of the 144 students originally assigned to the prevention group, 19 were considered part of the final control group (no participation). 69 students were not included in the analyses (41 from intervention and 28 from control). Alcohol use was assessed using the Health Behaviour questionnaire. Frequency of alcohol use and binge drinking over the past 90 days were assessed on a 9-point scale. Three additional questions assessed average and largest quantities of alcohol consumed per occasion and intoxication. **Baseline comparability** **Groups balanced at baseline:** No or NR **Comments**: Differences in school year by intervention and control group. **Attrition** **Number of participants completing study**: intervention 84 (58.3%); control 84 (75%). See other detail **Reasons for non-completion**: Didn't complete all intervention sessions, non-usable data. Attrition was related to drinking status (more drinkers lost than non-	**Knowledge and understanding** NR **Attitudes and values** There no intervention effects on alcohol-related expectancies **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Compared to students in the control groups, students participating in the prevention programme reported drinking less frequently over time (p=0.004), binge drinking less frequently over time (p=0.032) and having number of alcohol-related consequences (p=0.036). (Data only presented in graphs)

	More than once per week: 3.6, 2.8 Frequency of current binge drinking %, boys, girls A few times a week: 15.3, 18.8 Once per month: 3.4, 8.7 2-3 days per month: 8.5, 5.1 Once per week: 1.7, 3.6 More than once per week: 3.3, 1.4	drinkers).	

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Donaldson et al (1995) RCT (cluster) - **Objective:** To assess the Adolescent Alcohol Prevention Trial **Setting:** School, **Country:** USA **Funding source:** National Institute on Alcohol Abuse and Alcoholism	**Intervention details** **Name**: Adolescent Alcohol Prevention Trial (APPT) **Focus/aim**: Alcohol **Programme type**: Social influence **Theoretical base**: Social influence **Key components**: School units were randomly assigned to one of four conditions: (1) Resistance skills training + ICU; (2) Normative education + ICU; (3) Resistance skills training + normative education + ICU; (4) ICU only. **Providers/delivers**: Project staff **Length**: (1) 8 lessons; (2) 8 lessons; (3) 10 lessons; (4) 4 lessons **Duration**: all 45 mins **Intensity**: 1 year (eighth grade) **Other details**: A follow-up booster was conducted in the seventh grade consisting of a condensed version of the original program in the fifth grade. **Comparator**: ICU only **Population details** **Inclusion**: Students in schools receiving AAPT **Exclusion**: NR **Total** n= 11,995 **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = 47% **Mean age (range)**: **Ethnicity**: 45.3% European American, 37.4% Hispanic, 12.6% Asian, 3% African American and 1.7% other ethnic groups. **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANCOVA **Unit of allocation:** Organisation/ institution (130 school units) **Unit of analysis:** Individual **Time to follow-up**: Posttest at 1 year **Other details:** Participants were analysed according to whether they received the interventions in fifth grade followed by a booster programme in seventh grade, or in seventh grade only. **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: None` **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Fifth grade interventions: There was a significant relationship between seventh grade refusal skills and eighth grade alcohol use ($p<0.05$) for adolescents who believed it was not acceptable to drink alcohol. The same analysis for adolescents who believed that it was acceptable to drink revealed a positive but nonsignificant relationship between seventh grade refusal skills and eighth grade alcohol use. Seventh grade interventions: There was a significant inverse relationship between 7th grade refusal skills and 8th grade alcohol use ($p<0.01$) for those who believed that it was not acceptable to drink. For adolescents who believed it was acceptable to drink there was not a significant relationship between seven grade refusal skills and eighth grade alcohol use. The authors report that resistance training can effectively delay the onset of alcohol use when adolescents believe it is not acceptable to drink. For adolescents who believe it is acceptable to drink refusal skills did not predict subsequent alcohol use.

Study details	Intervention and population details	Analyses	Results
Donaldson et al (2000) RCT (cluster) - **Objective:** To assess the effects of normative education on alcohol and cigarette consumption using self-report and reciprocal best friend reports of substance use. **Setting:** School **Country:** USA **Funding source:** NIAAA	**Intervention details** For intervention details see Donaldson et al. (1995) **Population details** **Inclusion**: Data collected as part of the AAPT **Exclusion**: NR **Total** n= 11,995 **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = 47% **Mean age (range)**: 5th grade **Ethnicity**: 45% European American students, 37% Hispanic students, 13% Asian students, 3% African American students, 2% other **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Chi-square, logistic regression **Unit of allocation:** **Unit of analysis:** Individual **Time to follow-up**: 8th, 9th and 10th grades **Other details:** Reciprocal best friend reports were collected by asking participants how many of their 3 best friends ever drank alcohol, ever used alcohol in the past 30 days, and had ever been drunk. For each item, response categories were 1 = "none", 2 = "one friend", 3 = "two friends" and 4 = "three friends". **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: NR **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Public schools: Significantly fewer students who received normative education used alcohol in the eighth, ninth and tenth grades than public schools receiving comparison interventions. With two exceptions, 30-day alcohol use at 9th grade and drunkenness at 10th grade, this finding was similar across the individual alcohol use items. For the majority of outcomes, students who received resistance skills training reported using alcohol more than students not receiving resistance skills training. Private schools: There were no significant effects on alcohol use of normative education or resistance skills training. Verified reports of alcohol use as a function of normative education and resistance training - % of users (Norm, Other; RT, Other) *Alcohol index* Public school 8th Grade (n=842): 54.0, 63.2**; 58.9, 57.6 9th Grade (n=666): 77.5, 85.7**; 84.9, 76.7** 10th Grade (n=520): 84.2, 91.1*; 90.1, 84.0* Private school 8th Grade (n=587): 65.1, 70.3; 65.7, 69.3 9th Grade (n=503): 85.8, 83.0; 82.8, 86.2 10th Grade (n=249): 94.9, 92.0; 92.7, 94.4 *Alcohol, 30-day* Public school 8th Grade (n=1333): 9.2, 15.1***; Private school 8th Grade (n=966): 13.4, 12.1;

			12.7, 10.7 9th Grade (n=871): 23.9, 29.7; 28.3, 23.6 10th Grade (n=580): 30.4, 37.9*; 37.7, 29.5* *Alcohol lifetime* Public 8th Grade (n=791): 47.1, 57.3**; 53.0, 50.7 9th Grade (n=572): 72.3, 82.9**; 81.4, 71.2** 10th Grade (n=464): 81.5, 89.0*; 88.9, 80.1** *Drunkenness* Public 8th Grade (n=1278): 4.2, 7.7**; 6.1, 5.2 9th Grade (n=772): 14.0, 21.6**; 18.2, 15.1 10th Grade (n=500): 28.3, 34.1; 35.1, 26.1* (*p<.05; **p<.01; ***p<.001)	10.2, 15.8** 9th Grade (n=607): 32.5, 29.4; 30.0, 31.9 10th Grade (n=229): 55.7, 44.7; 41.5, 60.4** Private 8th Grade (n=511): 59.3, 63.3; 60.2, 62.0 9th Grade (n=445): 82.0, 79.6; 77.6, 84.2 10th Grade (n=219): 92.5, 89.9; 89.7, 92.9 Private 8th Grade (n=937): 3.2, 1.1*; 2.5, 1.6 9th Grade (n=566): 12.8, 14.8; 15.9, 11.7 10th Grade (n=173): 33.7, 34.5; 26.7, 44.4*)

Study details	Intervention and population details	Analyses	Results
Hansen & Graham (1991) RCT (cluster) - **Objective:** To explore the potential of a programme delivered during seventh grade for deterring the onset of substance use. **Setting:** School, **Country:** USA **Funding source:** NIDA	**Intervention details** **Name**: AAPT **Focus/aim**: Alcohol **Programme type**: Social influence **Theoretical base**: Social Influence **Key components**: Schools randomly assigned to one of four intervention programmes: (1) Information only; (2) Resistance Training; (3) Normative education; and (4) combination of (1), (2) and (3). **Providers/delivers**: Project staff **Length**: (1) 4 sessions; (2 ,3) 9 sessions; (4) 10 sessions **Duration**: (1) 45 mins **Intensity**: Delivered over 1 school year **Other details**: Programme staff received a minimum of 2 weeks of intensive training. **Comparator**: (1) Information only **Population details** **Inclusion**: Recruited from 12 Junior high school in Los Angeles and Orange counties, California **Exclusion**: NR **Total** n= 3,011 students **Intervention**, (2) n= 33 classrooms; (3) n=27 classrooms; (4) n= 26 classrooms **Comparator**, (1) n= 32 classrooms **Male**: (1) 51.2%; (2) 50.3%; (3) 44.8%; (4) 44.6% **Mean age (range)**: Grade 7 students **Ethnicity**: (1) 9.8% Asian, 3.0% Black, 42.6% Hispanic, 52.2% White (2) 16.4% Asian, 1.7% Black, 21.7% Hispanic, 52.2% White (3) 25.9% Asian, 0.8% Black, 11.3% Hispanic, 52.2% White, (4) 17.5% Asian, 2.0% Black, 30.5% Hispanic, 38.8% White **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Linear analysis of covariance **Unit of allocation:** Organisation/ institution (12 schools) **Unit of analysis:** Group (classroom) **Time to follow-up**: 1 year **Other details:** Only data for students present at pre-test and posttest were included in analyses. **Baseline comparability** **Groups balanced at baseline:** Not clear **Comments**: Only baseline ethnicity reported **Attrition** **Number of participants completing study**: n=2,416 (80.2%) **Reasons for non-completion**: absence at assessment, unsuccessful tracking, personal or parental decline	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** The authors report that there was a main effect of normative education. Compared with classrooms that did not received normative education, those that did had significantly reduced rates of alcohol consumption ($p<0.001$). There was no effect of resistance training or the combined programme on alcohol use outcomes. The authors report that compared to classrooms that did not, classrooms receiving normative education had a delayed onset in ever being drunk, consumed less alcohol, and a reduced incidence of weekly and monthly alcohol consumption. They also state that increases in problems attributed to alcohol during the past year were reduced by normative education. (Significance test were not reported for any of these findings).

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Klitzner et al (1994) CBA + **Objective:** To examine the effectiveness of a drinking while driving (DWI) prevention program, Students against drink driving (SADD). **Setting:** School, **Country:** USA **Funding source:** NR	**Intervention details** **Name**: Students against drink driving **Focus/aim**: To reduce drink driving. **Programme type**: Multi-component programme **Theoretical base**: None **Key components**: Four main elements (1) 'Kick-Off' assembly, (2) student committee, (3) 15-session curriculum (Grade 10); and (4) 'Contract for life'. **Providers/delivers**: Teachers, peers **Length**: NR **Duration**: NR **Intensity**: NR **Other details**: None **Comparator**: No intervention. Delayed intervention. **Population details** **Inclusion**: Schools that were planning to implement the programmes. Control schools had to be willing to delay implementation for two years. **Exclusion**: Special education students **Total** n= 4,174 **Intervention**, California n= 1,600; New Mexico n= 500 **Comparator**, California n= 1,811; New Mexico n= 263 **Male**: NR **Mean age (range)**: Grades 9-12 **Ethnicity**: California: Intervention, 93% White; control, 89% White New Mexico: intervention, White 67%, Hispanic 33%; control, White 63% and Hispanic 28% **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Rank regression models **Unit of allocation:** Not applicable **Unit of analysis:** Individual **Time to follow-up**: End of the school year, and follow up assessment 1 year later. **Other details:** Three drinking measures: 1) 30-day drinking quantity, 2) 30-day prevalence of five or more drinks in a row (heavy drinking) and 3) an index of drinking problems. **Baseline comparability** **Groups balanced at baseline:** No or not reported **Comments**: **Attrition** **Number of participants completing study**: 7% in control groups and 26% intervention groups lost to follow-up **Reasons for non-completion**: Leaving school and absence on day of survey. Lower school achievement and religiosity amongst dropouts.	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** The results for the three drinking measures were essentially identical. Therefore, only the analysis of the drinking quantity was provided: A significant overall difference between treatment and comparison groups appeared in the quality measure ($p = .003$). There was a significant increase in the reported level of drinking from wave 1 to wave 2 ($p < .001$), but this trend was not differentiated between groups. In the three wave longitudinal analysis of drinking quantity, all effects were non-significant and the analysis failed to find differences in drinking quantity between the treatment and comparison students. There was no overall difference between intervention and comparison groups on the index of driving while intoxicated or riding with impaired drivers.

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Kreft (1998) RCT (cluster) - **Objective:** To illustrate how different conclusions can be reached from different choices of units of analyses and/or of treatment data (Reanalysis of Hansen & Graham 1991). **Setting:** School, **Country:** USA **Funding source:** NIDA	**Intervention details** **Name**: AAPT **Key components**: Schools randomly assigned to one of four intervention programmes: (1) Information only; (2) Resistance Training; (3) Normative education; and (4) combination of (1), (2) and (3). For full intervention details see Hansen & Graham (1991) **Population details** **Inclusion**: Junior high school students in the 7th grade **Exclusion**: **Total** n= 3,027 **Intervention**, (2) n=654; (3) n= 462; (4) n= 591 **Comparator**, (1) n= 671 **Male** n (%) = NR **Mean age (range)**: 7th grade **Ethnicity**: NR **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Multiple regression, ANCOVA **Unit of allocation:** Organisation/ institution (schools) **Unit of analysis:** Individual/Group **Time to follow-up**: 1 year **Other details:** students and classes **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: **Attrition** **Number of participants completing study**: n=2378 (78.6%) **Reasons for non-completion**: Missing data	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Using multiple regression analysis using the student as the unit of analysis shows a statistically significant effect for normative education ($p<0.05$) (This result was not supported by a better fit model). No statistically significant effects were found for resistance training or the combined program. Based on analyses conducted using the classroom as the unit of analysis, the author concluded that the programme (including the normative education component) was not effective.

Study details	Intervention and population details	Analyses	Results
McBride et al (2000) NRCT + **Objective:** To evaluate the School Health and Alcohol Harm Reduction Project (Phase 1) **Setting:** School **Country:** Australia **Funding source:** Western Australian Health Promotion Foundation	**Intervention details** **Name**: School Health and Alcohol Harm Reduction Project (Phase one) **Focus/aim**: Reduce alcohol-related harm **Programme type**: Harm minimisation **Theoretical base**: Social inoculation, relevancy **Key components**: Curriculum-based programme conducted in two phases over 2 years. Phase 1 consisted of 17 consecutive skills-based activities including skill rehearsal and group discussion. **Providers/delivers**: Teachers **Length**: 8-10 lessons **Duration**: 40-60 mins **Intensity**: NR **Other details**: Teachers participated in a 2-day training workshop. **Comparator**: No intervention **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 2343 **Intervention**, n= 1,111 (47%) **Comparator**, n= 1,232 (53%) **Male** n (%) = NR **Mean age (range)**: 12-13 year olds **Ethnicity**: NR **Baseline drinking behaviours**: (Intervention; Control) Mean age at first use:10.5 (SD 1.99); 10.5 (SD 1.98) Consumption at least weekly (%): 10.6; 13.3 At least monthly (%): 19.3; 21.0	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Non-parametric statistical procedures, stepwise multiple linear regression **Unit of allocation:** Organisation/ institution (14 schools) **Unit of analysis:** Individual **Time to follow-up**: 8 months from baseline **Other details:** Overall alcohol consumption was assessed using two variables (how often and how much per occasion). Risky drinking was also assessed. A harm scale was created to identify the number of harms experienced over a 12-month period. Context of use was based on six items to identify non-drinkers, supervised drinkers and unsupervised drinkers. **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Significant difference between intervention and control schools for context of use and harms associated with own use of alcohol. **Attrition** **Number of participants completing study**: n=1,727 (73.7%; 855 intervention students and 872 control students) **Reasons for non-completion**: Analyses only included students with baseline and follow-up data. Students lost to follow-up had less safe attitudes towards alcohol use issues, a higher level of alcohol consumption, were more	**Knowledge and understanding** There was a significant difference in the knowledge change score between control and intervention students (p =0.0001). Stepwise multiple linear regression indicated that the SHAHRP intervention was a strong predictor of knowledge change. **Attitudes and values** There was a significant difference in attitude change score means between intervention and control students (p = 0.0001). Comparison of change scores indicates that SHAHRP students had attitudes that were more supportive of safe alcohol use and a harm minimization approach to alcohol use than the control. Results from stepwise multiple linear regression indicated that the SHAHRP intervention was also a predictor of attitude change between baseline and follow-up. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** There was no difference in mean age at first use between the intervention and control group, or frequency of consumption or the amount of alcohol consumed per occasion. However, there was a significant difference in alcohol consumption change scores between the intervention and the control groups (p = 0.0087). Change score means indicated that both intervention and control groups increased consumption between baseline and follow-up; however, the control group demonstrated a greater increase in consumption than the intervention group.

	Less often (%): 51.8; 50.0 Nil (%): 18.3; 16.1 Normal consumption per occasion (%) More than four standard drinks: 2.2. 1.3 Two to four standard drinks: 2.8; 4.4 One to two standard drinks: 20.5; 20.4 Sip or taste: 56.4; 57.8 Nil: 18.1; 16.1	likely to be unsupervised drinkers and experienced more alcohol-related harm.	Results from the stepwise multiple linear regression indicated that the strongest predictor of change in consumption category was students' initial baseline consumption category. The SHAHRP intervention was also a predictor of change, with the intervention group showing a lower level of increase in consumption than the control group. Mean change scores indicated that supervised drinkers (p=0.0064 vs. control supervised drinkers) and non-drinkers (nonsignificant) from the intervention group had the lowest level of increase in consumption. However, at baseline there were significantly more unsupervised drinkers in the control group. Alcohol use outcomes (intervention n=855; control n=872) Consumption items Consumption at least weekly: 15.0; 18.9 At least monthly: 21.5; 26.3 Less often: 50.3; 45.6 Nil: 13.1; 10.1 Normal consumption per occasion More than four standard drinks: 5.4; 5.8 Two to four standard drinks: 6.0; 6.8 One to two standard drinks: 22.8; 26.5 Sip or taste: 52.1; 50.9 Nil: 13.1; 10.1 Mean age at first use: 10.8 (SD2.2); 10.6 (SD 2.2) Consumption category (mean): 4.0 (SD 2.9); 4.4 (SD 3)

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McBride et al (2003) NRCT + **Objective:** To evaluate the impact of the School Health and Harm Reduction Project (SHAHRP) (Phase One and Two) **Setting:** School, **Country:** Australia **Funding source:** Western Australian Health Promotion Foundation	**Intervention details** **Name**: School Health and Harm Reduction Project (SHAHRP) **Focus/aim**: To reduce alcohol-related harm **Programme type**: NR **Theoretical base**: NR **Key components**: Classroom programme, activity based **Providers/delivers**: Teachers, **Length**: 8 lessons in the first year followed by 5 boosters in second year. **Duration**: NR **Intensity**: Over 2 years **Other details**: see McBride et al. (2000) **Comparator**: Alcohol education of less than 10 weeks duration and based on West Australian K-10 health education curriculum, 'Rethinking drinking' and 'How will you feel tomorrow' **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 2,343 **Intervention**, n= 1,111 (47%) **Comparator**, n= 1,232 (53%) **Male**: NR **Mean age (range)**: 12/13-14 years **Ethnicity**: NR **Baseline drinking behaviours**: see McBride et al. (2000)	**Baseline comparability** **Groups balanced at baseline:** No **Comments**: see McBride et al. (2000) **Attrition** **Number of participants completing study**: n=1,778 (75.9%) **Reasons for non-completion**: Surveys excluded prior to data entry, students who had left the study, students did not attend on days when surveying was occurring (because of illness, truancy and so on), students who did not maintain same unique ID code. **Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Multi-level modelling **Unit of allocation:** Organisation/ institution (14 schools) **Unit of analysis:** Group **Time to follow-up**: 8-, 20- and 32-months from baseline. **Other details:** see McBride et al. (2000)	**Knowledge and understanding** Intervention students who had not consumed alcohol at the beginning of the study demonstrated greater alcohol-related knowledge at 8 months (28.1% difference) and at 20 months, after the control students had participated in alcohol education (12.3% difference). The significant difference in knowledge was not maintained 17 months after the conclusion of the intervention with differences between intervention and control knowledge scores continuing to dissipate (5.5% difference). Intervention students who had consumed alcohol in supervised settings (1 or more occasions) at the beginning of the study demonstrated a greater alcohol-related knowledge at 8 months (22.2%difference) and at 20 months after the control group had received alcohol education (6.4% difference). As with baseline non-drinkers, differences in knowledge scores continued to dissipate and were not significant 17 months after the intervention (1.8% difference). Intervention students who had consumed alcohol in unsupervised settings prior to the beginning of the study demonstrated a greater alcohol-related knowledge over the period of the study (16.5%, 10.7% and 4.4% difference at 8, 20 and 32 months, respectively) than their corresponding control group. **Attitudes and values** Baseline non-drinkers from the intervention group had significantly safer alcohol-related attitudes for the duration of the study. Baseline supervised students from the intervention group had significantly safer alcohol-related attitudes after phase one of the intervention; however this difference was not maintained during the period of the study. Baseline unsupervised drinkers from the intervention group had significantly safer alcohol-related attitudes for the duration of the study. **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** Baseline non-drinkers from the intervention group were significantly less likely to consume alcohol in a risky manner at 8-month follow-up after the first phase of the intervention, 20-month follow-up after the second phase of the intervention, and at 32-month follow-up, 17 months after the completion of the intervention. There was no significant difference in any of the behavioural measures between baseline, supervised students (those who had consumed alcohol in supervised settings on 1 or more occasion) from the intervention or control group. The interaction term between time and group was not significant for consumption for unsupervised alcohol users.

Study details	Intervention and population details	Analyses	Results
McBride et al (2004) NRCT + **Objective:** To evaluate School Health and Alcohol Harm Reduction Project (Phases 1 and 2) **Setting:** School, **Country:** Australia **Funding source:** Western Australian Health Promotion Foundation	**Intervention details** **Name**: School Health and Alcohol Harm Reduction Project **Focus/aim**: To reduce alcohol-related harm **Programme type**: Harm minimisation **Theoretical base**: social inoculation, relevancy **Key components**: Curriculum-based programme conducted in two phases over 2 years. For details of Phase 1 see McBride et al. (2000) [#97]. Phase 2 consisted of 12 activities including skill rehearsal, and group decision-making and discussions. **Providers/delivers**: Teachers **Length**: NR **Duration**: NR **Intensity**: over 5-7 weeks **Other details**: Teacher training was conducted prior to each phase. Phase 2 training was conducted over 2 days for teachers not trained during phase 1. Teacher manual and student workbooks were developed for each phase. The authors report that the costs of the intervention were AU$23.55 per student over two years. **Comparator**: Regular alcohol education in the second phase of study. **Population details** **Inclusion**: NR **Exclusion**: Some surveys (103) excluded because distinct pattern of answers, conflict between answers, unsolicited comments link to the first 2 exclusion criteria. **Total** n= 2,343	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Multi-level modelling **Unit of allocation:** Organisation/ institution (14 schools) **Unit of analysis:** Individual/Group **Time to follow-up**: 8, 20 and 32 months from baseline **Other details:** see McBride et al. (2000) for further process details **Baseline comparability** **Groups balanced at baseline:** No **Comments**: see McBride et al. (2000) [#97] **Attrition** **Number of participants completing study**: n=1,778 (75.9%; 863 intervention students and 915 control students) at 32-month follow-up **Reasons for non-completion**: Students left the study group, remained enrolled at the school but did not attend on the day of the survey, failed to maintain the unique ID code or were excluded. Students lost to follow-up had 'riskier' outcomes.	**Knowledge and understanding** The intervention group had significantly greater alcohol-related knowledge at 8-month follow-up. This significant difference was maintained at 20 months, however at the 32-month follow-up, the difference between the mean knowledge scores had converged (4.5% difference). **Attitudes and values** The intervention group reported significantly safer alcohol-related attitudes at the 8-month follow-up and this was maintained to the end of the study at 32 months, 17 months after the final phase of the intervention. Although the intervention group showed significantly safer alcohol-related attitudes at all time points, the greatest difference in mean scores was evident after the first phase of the intervention at 8 months. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Alcohol consumption: The intervention group consumed significantly less alcohol than the control group at the 8-month follow-up (31.4% difference) and the 20-month follow-up (31.7% difference). At final follow-up, 17 months after the intervention, the total amount of alcohol consumed by intervention and comparison students was beginning to converge (9.2% difference; significance not reported). Non-parametric tests showed that intervention students consumed alcohol significantly less often than comparison students at the first and second follow-ups (p= 0.03 and p<0.0001, respectively). Intervention students consumed significantly less alcohol per occasions at the second follow-up (p= 0.01). Alcohol consumption items (baseline, 8-, 20-, 32-month follow-up) At least once per week I: 12.3 (10.2, 14.7); 16.6 (14.2, 19.3); 23.6 (20.8, 26.6); 31.8 (28.7, 35.0) C: 14.9 (12.7, 17.4); 19.7 (17.2, 22.5); 30.5 (27.5, 33.6); 36.8 (33.7, 40.0)

	Intervention, n= 1,111 (47%) **Comparator**, n= 1,232 (53%) **Male** n (%) = NR **Mean age (range)**: 13-14 **Ethnicity**: NR **Baseline drinking behaviours**: see McBride et al. (2000)		At least once per month I: 22.1 (19.4, 25.0); 24.0 (21.2, 27.0); 29.2 (26.2, 32.4); 30.7 (27.7, 33.9) C: 26.3 (23.5, 29.3); 28.8 (25.9, 31.9); 31.1 (28.1, 34.2); 32.1 (29.1, 35.2) Less often I: 65.6 (62.3, 68.7); 59.4 (56.0, 62.7); 47.2 (43.8, 50.6); 38.3 (35.1, 41.6) C: 58.7 (55.4, 61.9); 51.4 (48.1, 54.7); 38.4 (35.2, 41.6); 31.2 (28.2, 34.3) Context of alcohol use: The intervention group reported a smaller increase in both supervised and unsupervised drinkers compared to the control group (data presented graphically). At the second and final follow-up, the intervention group had 18.9% and 36.3% more non-drinkers than the comparison group (significance not reported). Harm associated with own and other people's alcohol use: Intervention students reported less harm associated with their own use of alcohol compared to the comparison group at all three follow-ups (32.7%, 16.7% and 22.9% difference, respectively). There was no significant difference between intervention and control groups in the harm that they experienced associated with other people's alcohol use.

Study details	Intervention and population details	Analyses	Results
Morgenstern et al (2009) RCT (Cluster) ++ **Objective:** To examine the effects of a school-based alcohol education intervention **Setting:** School, family **Country:** Germany **Funding source:** Deutsche Angestellten-Krankenkasse	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1686 students **Intervention**, n= 16 schools, 41 classes, 911 students **Comparator**, n= 14 schools, 40 classes, 964 students **Male** n (%) = 52% **Mean age (range)**: 13.0 years (SD 0.75; range 12-15 yrs) **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: NR **Focus/aim**: Addressing social influences, and enhancing motivation to avoid substance use, working on beliefs about consequences of alcohol use, media/advertising literacy, resistance skills and alcohol-related normative beliefs. **Programme type**: NR **Theoretical base**: NR **Key components**: Four class units, a student booklet and a parent booklet **Providers/delivers**: Teachers **Length, duration**, **intensity**: Not clear **Other details**: **Comparator**: 'Usual curriculum', normal school lessons without any systematic education on alcohol	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Generalized linear latent and mixed models **Unit of allocation:** School: 30 schools **Unit of analysis:** Organisation/institution **Time to follow-up**: PT, 1 year **Other details:** NR **Baseline comparability** **Groups balanced at baseline:** **Comments**: Intervention students reported more lifetime experience with smoking and current smoking, more alcohol use of their social environment, more smoking friends, and higher average values on the rebelliousness scale. **Attrition** **Number of participants completing study**: 96% PT, 85% 1 yr **Reasons for non-completion**: Absent or changed schools	**Knowledge and understanding** Students in the intervention group had more correct answers on the alcohol quiz than students in the control group [PT: 4.60 (SE 0.082) vs. 4.17 (SE 0.066); p=0.000 / 12 mths: 4.61 (SE 0.068) vs. 4.34 (SE 0.064); p=0.004] **Attitudes and values** No significant difference between intervention and control students in terms of alcohol attitudes and intentions. Over time, both groups showed higher 'future use intentions' and lower 'refusal intentions'. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** There was no statistically significant intervention effect for the alcohol use outcomes, past month alcohol use (p=0.178), lifetime alcohol use (PT: adjusted OR 0.81 95% CI: 0.57–1.16 / 12 mths: adjusted OR 0.90 95% CI: 0.67–1.21) and lifetime drunkenness (PT: adjusted OR 0.70 95% CI: 0.48–1.02 / 12 mths: adjusted OR 0.77 95% CI: 0.52–1.12). However, intervention students were significantly less likely to report life-time binge drinking at PT [adjusted OR 0.56; 95% CI: 0.41, 0.77] and 12-month follow-up (adjusted OR 0.74; 95% CI 0.57, 0.97).

Study details	Intervention and population details	Analyses	Results
Newman et al (1992) RCT (cluster) - **Objective:** To evaluate a 9th Grade alcohol prevention programme **Setting:** School **Country:** USA **Funding source:** NR	**Intervention details** **Name**: Resisting Pressures to Drink and Drive **Focus/aim**: Reduction of drinking, drink driving, and riding with a drink driver **Programme type**: Resistance skills **Theoretical base**: problem behaviour theory; social cognitive theory; role theory; educational immunization **Key components**: Video based drama, student workbook **Providers/delivers**: Teachers, **Length**: 10 lessons **Duration**: 2 years **Intensity**: NR **Other details**: Teachers attended a 6-hour, one-day training session. **Comparator**: Traditional alcohol education **Population details** **Inclusion**: NR **Exclusion**: NR **Total**: Year One, n= 87 classes; Year Two, n=84 classes (both ~3,500 students) **Intervention**, Year One, n= 51 classes; Year Two, n=48 classes **Comparator**, Year One and Two, n= 36 classes **Male**: NR **Mean age (range)**: 14-15 years **Ethnicity**: NR **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: repeated measures ANOVA **Unit of allocation:** Group (87 classes) **Unit of analysis:** Group **Time to follow-up**: 6 weeks, 1 year (Year One cohort only) **Other details:** Data reported is restricted to students who were measured at baseline and both follow-ups. **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: No details reported **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**: NR	**Knowledge and understanding** The authors report that the programme was successful in increasing students' knowledge ($p<0.001$). **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** The authors report that the programme had little impact on alcohol consumption. There was no significant difference between intervention and control students in terms of their drinking behaviours. Year One outcomes (intervention, control): Percentage who consumed one or more glasses of alcohol (%) Pre: 64.9; 68.5 Post: 68.0; 70.5 Follow up: 79.2; 81.3 Average number of drinks consumed at last party (mean) Pre: 1.64; 1.90 Post: 1.86; 2.11 Follow up: 2.46; 2.63 Freq of drinking (number of times): Pre: 1.64; 1.88 Post: 2.34; 2.46 Follow up: 3.06; 3.43 The number of times students had ridden with a drinking driver in the last 30 days increased in both the intervention and control group, however, the increase in students who received the intervention was significantly less than that of control students ($p<0.05$).

Study details	Intervention and population details	Analyses	Results
Newton et al (2009) RCT (Cluster) + **Objective:** To conduct a cross-validation trial of the efficacy of a computerized school-based intervention for alcohol misuse in adolescents **Setting:** School **Country:** Australia **Funding source:** Australian Government Department of Health and Ageing	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 944 students **Intervention**, n= 513 **Comparator**, n= 431 **Male** n (%) = 60% **Mean age (range)**: 13.08 years **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: CLIMATE Schools **Focus/aim**: Reduce alcohol consumption **Programme type**: Alcohol harm minimisation **Theoretical base**: NR **Key components**: 15-20 min computer-based lesson and classroom based activities **Providers/delivers**: Other **Length, duration**, i**ntensity**: 6, 40 min lessons **Other details**: **Comparator**: Personal Development, Health and Physical Education classes	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Hierarchical linear modelling (to account for intra-cluster correlations between schools) **Unit of allocation:** School: 10 schools **Unit of analysis:** Organisation/institution **Time to follow-up**: PT and 6 months **Other details:** NR **Baseline comparability** **Groups balanced at baseline:** **Comments**: Significantly greater proportion of boys in the control versus CLIMATE group; CLIMATE group had significantly higher alcohol-related knowledge, higher average weekly consumption of alcohol, and higher frequency of bingeing in the past 3 months. **Attrition** **Number of participants completing study**: 69% PT, 62% 6 mths **Reasons for non-completion**: Students being absent on the day of the surveying, failing to use their unique identifying code, or answering <80% of the items on any scale	**Knowledge and understanding** CLIMATE group scored significantly higher on the knowledge scale than students in the control group at PT ($p<0.01$), no significant difference at 6 months. **Attitudes and values** No difference in alcohol-related expectancies between CLIMATE schools and control schools at PT or 6 months. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Average weekly alcohol consumption: Between baseline and PT, average consumption increased in the control group and decreased in the CLIMATE group (mean difference -1.75 standard drinks, $p<0.01$). No significant difference between groups at 6 month FU. Frequency of drinking to excess on a single occasion in the past 3 months: No significant difference between CLIMATE and control groups at PT or 6 months. Harm associated with own use of alcohol: No significant difference between CLIMATE and control groups at PT or 6 months.

Study details	Intervention and population details	Analyses	Results
Palmer et al (1998) RCT (cluster) - **Objective:** To apply a multilevel analytical strategy to reassess the 1-year drug prevention effectiveness of AAPT and to report program effects 2 years after implementation. (Re-analysis and follow-up of Hansen & Graham 1991) **Setting:** School **Country:** USA **Funding source:** NIAAA & NIDA	**Intervention details** **Name**: AAPT **Key components**: Schools randomly assigned to one of four intervention programmes: (1) Information only; (2) Resistance Training; (3) Normative education; and (4) combination of (1), (2) and (3). For intervention details see Hansen & Graham (1991) **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 3,027 **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = NR **Mean age (range)**: Grade 5 **Ethnicity**: NR **Baseline drinking behaviours**: NR For population details see Hansen & Graham (1991	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Multilevel analysis and ordinary least-squares analysis **Unit of allocation:** Organisation/ institution (school) **Unit of analysis:** Individual, class and school level **Time to follow-up**: 2 years **Other details:** In addition to the original comparisons, the authors examined each of the programme conditions (normative education, resistance training and combined programme) against the information-only control (ICU). Alcohol use composite measure created. **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: No details reported **Attrition** **Number of participants completing study**: 22% at year 1, 46% after year 2 **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Significant 1-year post intervention programme effects were observed when individual (n=2,370) and class (n=120) were used as the units of analysis. For analyses at the school level (n=12), there were no significant effects. The results of the multilevel analytic strategy that examined each programme condition against control showed that there were no programme effects for alcohol use. At the ninth grade follow-up, there were significant programme effects on alcohol use demonstrated for the normative education condition versus the information only control. This effect was found at both the classroom and school level analyses (p=0.003 and p=0.005, respectively).

Study details	Intervention and population details	Analyses	Results
Schnepf (2002) NRCT - **Objective:** To evaluate a classroom approach to alcohol education as implemented by a peer versus a teacher. **Setting:** School, **Country:** USA **Funding source:** NR	**Intervention details** **Name**: No name given **Focus/aim**: Alcohol **Programme type**: Knowledge and education **Theoretical base**: NR **Key components**: Alcohol education curriculum (Pruitt et al 1997) **Providers/delivers**: Other, Teacher vs. peer **Length**: 7 sessions **Duration**: 40 minutes **Intensity**: NR **Other details**: Peer leaders received training prior to study implementation. **Comparator**: Religious education **Population details** **Inclusion**: Parental consent required. **Exclusion**: **Total** n= 45 **Intervention**, n= 13 peer led; 19 teacher led **Comparator**, n= 13 **Male** n (%) = 33 (73%) **Mean age (range)**: 15.2 years **Ethnicity**: 80% African American; 15.6% mixed; 2.2% Hispanic **Baseline drinking behaviours**: 21 (46.7%) reported that they had never drank alcohol.	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANOVA **Unit of allocation:** Individual **Unit of analysis:** **Time to follow-up**: PT **Other details:** Alcohol consumption was assessed using 5 questions on the 2001 Youth Risk Behaviour Survey (YRBS). Adolescent problem drinking was assessed with a modified version of the Rutgers Alcohol Problem Index (RAPI). **Baseline comparability** **Groups balanced at baseline:** No or NR **Comments**: Groups roughly similar. **Attrition** **Number of participants completing study**: **Reasons for non-completion**:	**Knowledge and understanding** The peer- and teacher-led intervention groups scored significantly higher than the control group on the alcohol knowledge test. **Attitudes and values** No significant differences between groups in terms of developing a negative attitude towards alcohol. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Scores on YRBS - mean (SD) (pre; post) Peer: 7.15 (3.87); 5.92 (1.66); adjusted PT mean 5.51; adjusted difference scores -1.64 Teacher: 4.95 (1.47); 4.95 (1.27); adjusted PT mean 5.22; adjusted difference scores 0.03 Control: 5.77 (2.49); 5.38 (1.89); adjusted PT mean 5.40; adjusted difference scores -0.37 Scores on RAPI Peer: 26.62 (11.57); 21.67 (2.02); adjusted PT mean 21.36; adjusted difference scores -5.26 Teacher: 23.11 (5.73); 23.26 (5.27); adjusted PT mean 23.32; adjusted difference scores 0.21 Control: 21.31 (0.48); 21.23 (0.83); adjusted PT mean 21.46; adjusted difference scores 0.15 No significant differences between groups in terms of reduction alcohol consumption on the YRBS or in terms of reducing problem drinking.

Study details	Intervention and population details	Analyses	Results
Shope et al (1994) RCT (cluster) - **Objective:** To describe the development, implementation and evaluation of the enhanced AMPS curriculum. **Setting:** School, **Country:** USA **Funding source:** NIAAA	**Intervention details** **Name**: Enhanced AMPS curriculum **Focus/aim**: Alcohol **Programme type**: social pressure resistance training, normative education **Theoretical base**: social learning theory **Key components**: Not clear **Providers/delivers**: Teachers, **Length**: 8 sessions (6th), 5 session (7th), 4 sessions (8th) **Duration**: 45 mins **Intensity**: consecutive days **Other details**: Weekly meetings and training (38 hrs in 6th grade, 28.5 hours in 7th grade, 21.5 hrs in 8th grade) **Comparator**: NR. **Population details** **Inclusion**: School districts having at least two middle schools. **Exclusion**: See other process details for details of post hoc exclusions. **Total** n= 3704 (final sample n=1725) **Intervention**, n= 840 **Comparator**, n= 885 **Male** n (%) = 48% **Mean age (range)**: NR **Ethnicity**: NR **Baseline drinking behaviours**: Based on final sample	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Repeated measures analysis of variance **Unit of allocation:** Organisation/ institution (35 schools) **Unit of analysis:** Individual **Time to follow-up**: (1) 6th grade PT; (2) 7th grade PT; (3) 8th grade PT **Other details:** Same measures as other AMPS curriculum studies. Data from 76 students were removed from the analyses because they attended less than half the sessions each year, in addition 148 control and 133 treatment students were eliminated because they had previously received programmes similar to AMPS. **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: Numbers reporting unsupervised alcohol use higher at baseline in treatment group **Attrition** **Number of participants completing study**: (1) 3356, (2) 2602, (3) 2539 (all n=2082) **Reasons for non-completion**: Change in consent required, moving and absence. Control group lost more students than treatment group, more boys lost than girls, and more unsupervised drinkers lost. Also a trend towards more alcohol use (p=0.06) and	**Knowledge and understanding** No significant differences existed between groups at pre-test, but at all follow-ups, treatment group students had significantly higher curriculum knowledge than control students. **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Alcohol use increased over time in both the intervention and control groups. There was no difference in alcohol use between the intervention and control groups at any of the follow-up time points. The authors report that the results of the repeated measures ANOVA indicated different rates of increasing alcohol misuse over time for treatment groups within prior drinking experience subgroups. Within the unsupervised subgroup, treatment students' alcohol misuse was significantly higher ($p<0.05$) than control students'. Means (SD) for alcohol use and misuse Alcohol misuse (treatment; control) Grade 6 pre-test Abstainer (n=512; n=547): 0.06 (0.25); 0.05 (0.22) Supervised (n=123; n=145): 1.00 (0.22); 1.02 (0.25) Unsupervised (n=56; n=53): 1.30 (1.06); 1.04 (0.28) Grade 6 PT Abstainer: 0.22 (0.49); 0.19 (0.45) Supervised: 0.83 (0.69); 0.81 (0.74) Unsupervised: 1.21 (1.36); 1.26 (1.50) Grade 7 PT Abstainer: 0.42 (0.76); 0.35 (0.66) Supervised: 0.83 (0.94); 0.85 (0.58)

	Abstainers: 72.6% Supervised alcohol use: 19.2% Unsupervised use: 8.2%	significantly more alcohol use (p<0.001).	Unsupervised: 1.18 (1.19); 1.17 (1.30) Grade 8 PT Abstainer: 0.65 (1.08); 0.62 (1.04) Supervised: 1.07 (1.14); 1.04 (1.14) Unsupervised: 1.39 (1.57); 1.43 (1.45) Alcohol misuse (intervention; control) Grade 6 pre-test Abstainer (n=511; n=552): 0.00 (0.06); 0.02 (0.20) Supervised (n=134; n=154): 0.35 (0.68); 0.29 (0.66) Unsupervised (n=63; n=58): 1.71 (1.83); 1.06 (1.16) Grade 6 PT Abstainer: 0.13 (0.58); 0.11 (0.52) Supervised: 0.36 (0.77); 0.38 (1.07) Unsupervised: 1.08 (1.62); 1.24 (1.90) Grade 7 PT Abstainer: 0.34 (1.12); 0.25 (0.87) Supervised: 0.43 (0.89); 0.60 (1.33) Unsupervised: 1.48 (2.00); 1.25 (1.73) Grade 8 PT Abstainer: 0.58 (1.31); 0.59 (1.41) Supervised: 0.89 (1.59); 0.91 (1.50) Unsupervised: 1.86 (2.27); 2.03 (2.26)

Study details	Intervention and population details	Analyses	Results
Shope et al (1996a) CBA + **Objective:** To increase alcohol prevention knowledge and refusal skill abilities as well as lowing rates of alcohol use, alcohol misuse and driving under the influence of alcohol. Also to investigate gender differences and previous intervention knowledge **Setting:** School, **Country:** USA **Funding source:** National Institute on Alcohol Abuse and Alcoholism	**Intervention details** **Name**: Alcohol Misuse Prevention Study (AMPS) **Focus/aim**: To increase students alcohol prevention knowledge, increase their ability to refuse the offer of an alcoholic drink, and slow their usually increasing rates of alcohol misuse and driving after drinking. **Programme type**: Social influence program **Theoretical base**: Social Learning Theory **Key components**: Increase awareness of alcohol risks, alcohol misuse, situations and social pressures to misusing alcohol **Providers/delivers**: Teachers, **Length**: NR **Duration**: 45 mins **Intensity**: 5 sessions **Other details**: Teachers trained for 16 hrs over 4 days **Comparator**: **Population details** **Inclusion**: Students in the graduating class of 1991 who had participated in the AMPS project as sixth graders through eighth graders. **Exclusion**: Two districts excluded either because they did not permit curriculum implementation or did not permit a full twelfth grade posttest. **Total** n= 1037 (2031 at pre-test) **Intervention**, n= 507 **Comparator**, n= 530 **Male** n (%) = n=533 **Mean age (range)**: 6th Grade (at baseline) **Ethnicity**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANOVA, repeated measures ANOVA, Correlation, t tests **Unit of allocation:** Group (10th grade classes) **Unit of analysis:** Individual **Time to follow-up**: 2 years **Other details:** Data on 1041 students who completed all 3 questionnaires were analysed. Frequency and quantity of alcohol use assessed separately for beer, wine and liquor on a 5-point scale for frequency and 6-point scale for quantity. Alcohol frequency/quantity index created. Alcohol misuse was measured by 10 items. **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: **Attrition** **Number of participants completing study**: n=1613 grade 10 PT, n=1185 grade 12 PT **Reasons for non-completion**: Fewer Black students, lower knowledge scores, more alcohol use and misuse, and more driving after drinking. Controls more likely to be lost to follow-up.	**Knowledge and understanding** Means (SD) for knowledge, refusal skills and driving after drinking measures (curriculum n=507; control n=530). Knowledge Pre-test: 63.4 (17.0); 63.4 (19.0) Grade 10 PT: 72.3 (18.5); 64.8 (21.0) Grade 12 PT: 71.8 (18.4); 69.3 (17.7) Refusal skills Grade 10 PT: 15.46 (2.81); 15.00 (3.18) Driving after Drinking Pre-test: 0.09 (0.44); 0.10 (0.46) Grade 10 PT: 0.16 (0.59); 0.13 (0.50) Grade 12 PT 0.60 (1.02); 0.69 (1.10) Knowledge of alcohol-t tests showed that intervention group had significantly more knowledge than controls at grade 10 ($p<0.001$) and grade 12 posttest ($P<0.027$). **Attitudes and values** NR **Personal and social skills** Refusal abilities-10th grade refusal scores correlated positively with knowledge and negatively with alcohol misuse and driving after drinking. Control group showed a sig negative correlation between refusal skill and driving after drinking (r=-0.20) **Health and social outcomes related to alcohol and sexual health** Means (SD) for alcohol use measures Alcohol use (curriculum n=507; control n=530) Pre-test: 1.98 (1.95); 1.98 (1.84) Grade 10 PT: 2.12 (2.00); 2.06 (1.89)

	Baseline drinking behaviours: Intervention group (mean scores) =knowledge 63.4, alcohol use 1.98, alcohol misuse 1.63, driving after drinking, 0.09. Control group (mean scores) =knowledge 63.4, alcohol use 1.98, alcohol misuse 1.58, driving after drinking, 0.10.		Grade 12 PT: 2.71 (2.11); 2.53 (1.99) Alcohol misuse (curriculum, control) Pre-test: 1.63 (2.03); 1.58 (2.09) Grade 10 PT: 1.75 (2.09); 1.73 (2.18) Grade 12 PT: 2.12 (2.08); 2.41 (2.32) Control boys used significantly more alcohol that intervention girls in post-hoc analysis. The sixth grade curriculum had no significant effect on high school alcohol use. Students in the control group reported more alcohol misuse at Grade 12 posttest than the intervention group ($p<0.043$). The post-hoc analyses revealed an effect of the sixth grade curriculum over time ($p<0.003$).

Study details	Intervention and population details	Analyses	Results
Vogl et al (2009) RCT (Cluster) + **Objective:** To examine a computerized harm minimization intervention to reduce alcohol misuse and related harms in adolescents. **Setting:** School **Country:** Australia **Funding source:** National Drug and Alcohol Research Centre	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1466 students; 16 schools **Intervention**, n= 611 students **Comparator**, n= 855 students **Male** n (%) = 59%; 45% CL; 69% CO **Mean age (range)**: 13 years (SD = 0.40) **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: CLIMATE Alcohol course (CL) **Focus/aim**: Harm minimization **Programme type**: Social influence **Theoretical base**: NR **Key components**: Six-lesson harm minimization course; 15–20-minute computer-based lesson and class activities. Cartoon-based teenage drama, role-plays, small group discussions, decision-making and problem-solving activities and skill rehearsal. **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: 40 mins each; **Other details**: **Comparator**: Alcohol education delivered-as usual (CO)	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Hierarchical linear modelling, hierarchical generalized linear modelling **Unit of allocation:** School **Unit of analysis:** Individual/School **Time to follow-up**: PT, 6 and 12 months **Other details:** HLM/HGLM procedures were abandoned in favour of single-level analyses when the unconditional hierarchical model revealed that less than 10% of systematic variance existed at the between-school level. **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: **Attrition** **Number of participants completing study**: n=1,434 baseline; 77.2% PT; 71.5% 6mo; 70.9% 12mo **Reasons for non-completion**: Absence or failing to use the same unique identification code. More likely to be male and higher risk in terms of alcohol-related outcomes.	**Knowledge and understanding** Students in the CL group scored significantly higher than students in the CO group at post-intervention (P< 0.0001), this difference diminished over subsequent follow-ups. Knowledge [mean (SD)] - CL vs. CO PT Males: 11.38 (2.57) vs. 7.69 (2.76); Females: 10.40 (2.38); 6.94 (2.49) 6 mths Males: 10.00 (2.94) vs. 8.01 (2.67); Females: 9.50 (2.68) vs. 7.62 (2.57). 12 mths Males: 10.07 (2.92) vs. 8.63 (2.83); Females: 9.46 (2.54) vs. 7.97 (2.21) **Attitudes and values** Alcohol-related expectancies: The increase in positive alcohol-related expectancies remained greater for females in the CO group compared to the CL group from baseline to PT (P<0.0001), 6 month (P = 0.009) and 12 month (P < 0.0001) follow-up. Boys in the CL group also had a significant decrease in positive alcohol-related expectancies from baseline to PT, compared to an increase in the CO group (P = 0.0024). No differences between groups at 6-month follow-up, but at 12 months, boys in the CL group did not report as great an increase in positive alcohol-related expectancies as did boys in the CO group (P = 0.004). Positive alcohol-related expectancies [mean (SD)] CL vs. CO PT Males 5.79 (3.70) vs. 6.71 (4.18); Females 4.00 (3.42) vs. 5.44 (3.86); 6 mths Males 7.16 (4.21) vs. 7.25 (4.21); Females 4.73 (3.65) vs. 5.82 (3.93); 12 mths Males 7.56 (4.13) vs. 8.10 (4.41); Females 5.36 (3.92) vs. 6.84 (4.18) **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Weekly alcohol consumption: Female average alcohol consumption

			remained relatively constant between baseline and 6-month follow-up for the CL group and increased in the CO group (P=0.008 for comparison). At 12 months, CO group had a greater increase in average alcohol consumption compared with the CL group (P=0.012 for comparison). For boys there were no significant differences between intervention groups. Average weekly alcohol consumption [Mean (SD)] CL vs. CO PT Males: 1.30 (7.37) vs. 3.42 (14.91); Females: 1.17 (8.56) vs. 1.12 (8.16) 6 mths Males: 4.05 (14.59) vs. 3.51 (14.83); Females: 0.62 (2.38) vs. 1.66 (7.65) 12 mths Males: 3.86 (14.54) vs. 3.50 (13.12); Females: 0.99 (4.07) vs. 2.25 (10.16) Frequency of drinking to excess on a single occasion in the past 3 months: Girls in the CO group increased their frequency of binge drinking in the past 3 months significantly more than girls in the CL group between baseline and 6 months (P=0.019) and between baseline and 12 months (P=0.0076). For boys there were no significant differences between intervention groups. Drinking to excess [mean (SD)] - CL vs. CO PT Males 0.74 (4.62) vs. 0.94 (4.69); Females 0.50 (3.19) vs. 0.57 (3.06) 6 mths Males 0.95 (3.67) vs. 0.84 (4.41); Females 0.28 (1.24) vs. 0.87 (4.47) 12 mths Males 1.07 (3.69) vs. 1.16 (4.72) ; Females 0.38 (1.16) vs. 0.93 (3.45) Harms from own use of alcohol: Girls in the CLIMATE group had significantly less of an increase in harms than the CONTROL students (P=0.01). No significant differences in the increase in number of harms between conditions for boys. Harms (own) [mean (SD)] CL vs. CO PT Males 4.97 (12.13) vs. 7.13 (24.61); Females 2.22 (7.47) vs. 4.30 (17.35) 6 mths Males 9.00 (19.91) vs. 7.39 (24.25); Females 3.56 (14.53) vs. 5.69 (17.32) 12 mths Males 11.67 (27.51) vs. 10.79 (29.48); Females 3.30 (9.69) vs. 7.15 (22.93)

Study details	Intervention and population details	Analyses	Results
Wilhelmsen et al (1994) NRCT - **Objective:** Do more alcohol specific prevention programmes (the one with highest student involvement) have better effects in students by enhancing changes in alcohol use and influencing cognitive structures predictive of alcohol use?. The study had three arms: 1. Highly role specific (HRS), less role specific (LRS) and control. **Setting:** School, **Country:** Norway **Funding source:** Various Norwegian Research Councils, Municipality and University of Bergen	**Intervention details** **Name**: HRS and LRS **Focus/aim**: To create a consciousness of existing social norms to enhance drinking resistance **Programme type**: Social norms **Theoretical base**: Social cognitive theory **Key components**: Two intervention conditions: (1) Highly role specific (HRC) - one teacher and four peers trained to implement pre-planned activities; and (2) Less role specific (LRC) - one teacher and two peers led sessions in collaboration. Curriculum included 4 topics: alcohol use and social traditions; norms for alcohol use; managing drinking pressure; and attitudes to alcohol use. **Providers/delivers**: Peer led, with teachers **Length**: 10 lessons **Duration**: 2 months **Intensity**: 45 mins+ 2day workshops par & teach+1day peer lea **Other details**: **Comparator**: Standard education **Population details** **Inclusion**: Parental consent **Exclusion**: **Total** n= 915 (95.8%) **Intervention**, n= HRS 279; LRS 314 **Comparator**, n= 262 **Male** n (%) = **Mean age (range)**: 7th grade **Ethnicity**: **Baseline drinking behaviours**: Scores of 0.71, 0.8 and 0.67 respectively for the three arms	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: ANCOVA and ANOVA **Unit of allocation:** Organisation/institution (4 schools in the Bergen area were each assigned to one of the 3 arms, for a total of 12 schools) **Unit of analysis:** Individual **Time to follow-up**: Post-test **Other details:** Should have been school based analysis but this does not appear to have happened. **Baseline comparability** **Groups balanced at baseline**: **Comments**: 7th grade students **Attrition** **Number of participants completing study**: 909 (95.2%) **Reasons for non-completion**:	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Students in the HRS arm had stronger attitudes and drank less than those in the other two arms. LRS compared to no intervention had not effect.

Alcohol: classroom based – substance use (including alcohol)

Study details	Intervention and population details	Analyses	Results
Becker et al (1992) CBA - **Objective:** To assess the impact of DARE on fifth grade students. **Setting:** School, **Country:** USA **Funding source:** John and Dora Haynes Foundation	**Intervention details** **Name**: DARE **Focus/aim**: Alcohol and drugs **Programme type**: NR **Theoretical base**: social influence **Key components**: Core DARE curriculum **Providers/delivers**: External, Police **Length**: 17 weeks **Duration**: 1 hour **Intensity**: Weekly **Other details**: None **Comparator**: No intervention **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 3109 **Intervention**, n= 1913 **Comparator**, n= 1196 **Male**: NR **Mean age (range)**: 10-11 years **Ethnicity**: NR **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Multiple regression **Unit of allocation:** Organisation/ institution (School) **Unit of analysis:** Organisation/ institution **Time to follow-up**: Post intervention **Other details:** Results not tracked for individuals, significance of change in alcohol variables not calculated **Baseline comparability** **Groups balanced at baseline:** No or NR **Comments**: No details reported **Attrition** **Number of participants completing study**: n=2878 (994 in control group and 1884 in DARE group) **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Alcohol use over time - mean (pre; post) Beer Control: 0.20; 0.34 DARE: 0.21; 0.22 Wine Control: 0.17; 0.20 DARE: 0.18; 0.20 Liquor Control: 0.07; 0.13 DARE: 0.08; 0.09

Study details	Intervention and population details	Analyses	Results
Bell et al (1993) RCT (cluster) **Objective:** To evaluate Project ALERT at two year follow-up. **Setting:** School + other, Parental involvement **Country:** USA **Funding source:** Conrad N. Hilton Foundation.	**Intervention details** **Name**: Project ALERT **Focus/aim**: To reduce substance use, change beliefs that encourage use or inhibit successful resistance **Programme type**: social influence model **Theoretical base**: Social influence model, Health belief model, Social learning model and self-efficacy theory of behaviour **Key components**: Resistance motivation, reduce barriers to resistance, reinforces group norms against use. Role-playing, psychodrama, and written responses to practice different ways of saying no. **Providers/delivers**: Teachers, Teen Leader assisted by teacher **Length**: 11 lessons (8 in 7th grade and 3 in 8th grade) **Duration**: NR **Intensity**: Weekly **Other details**: **Comparator**: Control = other prevention curricula already in place **Population details** **Inclusion**: To be included in the analysis of grade 9 outcomes, a student must have: filled out a questionnaire at baseline, stayed in a Project Alert school for at least 12 months, responded about the outcome of interest on the 24-month questionnaire **Exclusion**: NR **Total** n= 6527 **Intervention**, n= 20 schools **Comparator**, n= 10 schools	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report, tobacco and cannabis results validated with saliva tests) **Statistical method(s) used to analyse data**: Logistic regression **Unit of allocation:** Organisation/institution (School) **Unit of analysis:** Individual **Time to follow-up**: 2 years (grade 9) **Other details:** **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: Matched according to community size and type (city, town, rural, community) **Attrition** **Number of participants completing study**: 4694-4970 (72-76% of baseline sample) **Reasons for non-completion**: Some students did not complete the surveys because of a lack of parental permission, some were absent, some refused to participate, moved and could not be tracked. Those who were lost to attrition tended to be those more at risk of substance use.	**Knowledge and understanding** NR **Attitudes and values** Beliefs about consequences of using each alcohol risk level (alcohol risk level 1, 2, 3). Social consequences scale (0-3) Teen leader 0.41*, 0.60, 0.82 Adult-only 0.49, 0.62, 0.88 Control 0.51, 0.65, 0.84 No risk from occasional use Teen leader 20.1, 30.8, 37.6 Adult only 22.0*, 32.4, 37.6 Control 16.6, 29.5, 35.8 Little risk of addiction/dependence Adult-only 19.6, 31.0, 40.9 Teen leader 19.2, 30.3, 40.9 Control 22.0, 30.7, 41.4 *p≤.10 Normative perceptions about use of alcohol by baseline risk level (alcohol risk level 1, 2, 3) Mean estimated prevalence of peer use Teen leader 53.4**, 58.0***, 67.1 Adult-only 54.2* 61.6*, 69.0 Control 60.1, 65.6, 69.7 Friends tolerate use Teen leader 37.9**, 58.8, 80.1 Adult-only 46.4, 65.7*, 81.8* Control 47.4, 60.3, 76.2 Refusal does not gain respect Teen leader 26.8***, 37.6**, 47.5 Adult only 36.9, 41.8, 53.0 Control 40.2, 44.4, 51.1

	Male n (%) = 52 **Mean age (range)**: 7th and 8th grade **Ethnicity**: 8% Asian, 67% White, 10% Hispanic, 10% Black, 4% Indian/mixed **Baseline drinking behaviours**: 77% had already tried alcohol, 23% reported recent use of alcohol		Hard to resist at a party Teen leader 33.7, 45.8**, 56.8 Adult-only 34.7, 50.9, 62.2* Control 36.4, 52.0, 56.0 *p≤.10, **p≤.05, ***p≤.01 Resistance self-efficacy (RSE) and expectations of use for alcohol use by baseline risk level (alcohol risk level 1, 2, 3) Low RSE on a date Teen leader 30.5, 48.6, 67.5 Adult only 12.2, 22.3, 32.8 Control 13.1, 23.3, 28.6 Low RSE on a party Teen leader 30.5, 48.6, 67.5 Adult-only 30.8, 52.6, 68.7 Control 32.7, 53.2, 65.1 Expect to use in next 6 months Teen leader 27.3, 52.0, 78.4 Adult only 28.7, 56.9*, 77.2 Control 29.2, 51.9, 76.4 **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** NR

Study details	Intervention and population details	Analyses	Results
Bennett (1995) RCT (cluster) - **Objective:** To investigate differences in drug use and attitudes about drugs among adolescents based on their classification as high, average or low achieving students. **Setting:** School, **Country:** USA **Funding source:** NIDA	**Intervention details** **Name**: DARE **Other details**: See Clayton et al 1991, 1996 for full description of DARE programme. **Population details** **Inclusion**: Achievement test scores available (based on Comprehensive Test of Battery Skills). **Exclusion**: **Total** n= 1801 (86.9% of original sample) **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = 51.3% **Mean age (range)**: 6th grade students **Ethnicity**: 75.1% White, 21.8% African American, 3.1% 'other' **Baseline drinking behaviours**:	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANOVA **Unit of allocation:** Organisation/ institution (31 schools) **Unit of analysis:** **Time to follow-up**: PT and then follow-up from 7-9th grade **Other details:** **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: **Attrition** **Number of participants completing study**: **Reasons for non-completion**:	**Knowledge and understanding** NR **Attitudes and values** At all three achievement levels, students who received the DARE programme reported significantly more negative attitudes to alcohol than comparison students at post-test, and at the 7th grade follow-up for average achievers. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Low achieving students: At post-test, mean scores were similar between treatment and comparison students. A significant difference was observed in past year alcohol use at the 7th grade follow-up only, with more participants in the comparison group reporting that they had used alcohol on at least one occasion compared to DARE students ($p<0.05$). Average achieving students: No significant differences observed on alcohol use measure at PT or any of the follow-ups. High achieving students: No significant differences observed on alcohol use measure at PT or any of the follow-ups.

Study details	Intervention and population details	Analyses	Results
Botvin et al (1990a; 1995) RCT (cluster) + **Objective:** The paper presents data presents data on the cumulative effects of life skills training over 3 and 6 years. **Setting:** School, **Country:** USA **Funding source:** National Heart, Lung and Blood Institute, New York State Division of Substance Abuse Services	**Intervention details** **Name**: Life Skills Training + (1) one day teacher workshops or + (2) teacher training by video **Focus/aim**: Alcohol and drugs **Programme type**: Cognitive-behavioural, social influences **Theoretical base**: NR **Key components**: Demonstration, behavioural rehearsal, feedback and reinforcement, homework assignments **Providers/delivers**: Teachers, **Length**: 15 sessions **Duration**: NR **Intensity**: NR **Other details**: 10 booster sessions in grade 8 and 5 booster sessions in grade 9. **Comparator**: NR **Population details** **Inclusion**: NR **Exclusion**: Schools with implementation scores below 60% were excluded from the analyses (applies to 3 year data and 6 year high fidelity subsample data). **Total** n= 4466 **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = 52% **Mean age (range)**: NR - 7th graders **Ethnicity**: 91% White, 2% Black, 2% Hispanic and 1% Native American. **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: General linear models, MANOVA and ANOVA. **Unit of allocation:** Group (56 schools) **Unit of analysis:** Individual **Time to follow-up**: 3 years, 6 years **Other details:** **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: NR **Attrition** **Number of participants completing study**: 3684 (83%) at 3 yrs; 3597 (81%) at 6 yrs **Reasons for non-completion**: See exclusion.	**Knowledge and understanding** Mean (SE) (LST1; LST2; control) Drinking knowledge: 7.54* (0.08); 7.43** (0.08); 7.08 (0.07) Drinking attitudes: 37.05 (0.29); 37.62*** (0.28); 36.74 (0.26) Drinking knowledge was significantly higher in the LST1 and LST2 groups relative to controls (p<0.0001 and p<0.001, respectively). Interpersonal skills knowledge scores were significantly higher for intervention conditions than control. Marginally significant effects on communication skills knowledge but no effect on any of the personality variables. *p<0.0001; ** p<0.001 and *** p<0.05 **Attitudes and values** No significant effects on drinking attitudes. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Mean (SE) (LST1; LST2; control) Drinking frequency: 1.86 (0.04); 1.90 (0.04); 1.90 (0.03) Drinking amount: 1.30 (0.02); 1.35 (0.02); 1.33 (0.02) Drunkenness: 1.37 (0.02); 1.42 (0.02); 1.40 (0.02) No significant effects found for drinking frequency or amount. Frequency of getting drunk was significantly lower in the LST2 condition (p=0.0391). Six year data for whole sample [#12 Botvin 1995] Mean (SE) (LST1; LST2; control) Monthly alcohol use: 0.61 (0.03); 0.57 (0.03); 0.60 (0.02) Weekly alcohol use: 0.29 (0.02); 0.24 (0.20); 0.29 (0.02) 3 or more drinks per occasion: 0.57 (0.02); 0.55 (0.55); 0.59 (0.02) Drunk: 0.34* (0.02); 0.33** (0.03); 0.40 (0.02)

			Prevalence of being drunk was significantly lower in the intervention groups compared to control (p<0.05* and p<0.01**, respectively). No significant difference on monthly or weekly use. Six year data for high fidelity sample (>60%; n=2752) Mean (SE) (LST1 n=762; LST2 n=848; control n=1142) Monthly alcohol use: 0.58 (0.03); 0.54** (0.03); 0.60 (0.02) Weekly alcohol use: 0.24* (0.02); 0.20** (0.02); 0.29 (0.02) 3 or more drinks per occasion: 0.53** (0.03); 0.52** (0.02); 0.59 (0.02) Drunk: 0.31* (0.03); 0.28** (0.03); 0.40 (0.02) *p<0.05 and **p<0.01 vs. control Both intervention groups had significantly lower prevalence rates for weekly drinking, heavy drinking, and problem drinking. Participants in the LST2 group also had significantly lower monthly drinking rates.

Study details	Intervention and population details	Analyses	Results
Botvin et al (1995b) RCT (cluster) + **Objective:** To test the effectiveness of two alcohol and drug abuse prevention programs among inner city minority 7th graders from six schools **Setting:** School, **Country:** USA **Funding source:** New York State Division of Substance Abuse Services	**Intervention details** **Name**: (1) Life skills training; (2) culturally focused intervention **Focus/aim**: Alcohol and drugs **Programme type**: life skills training, problem solving, decision making **Theoretical base**: NR **Key components**: (1) demonstration, group discussion, modelling, behavioural feedback and reinforcement, homework; (2) storytelling, videos and demonstration by peer leaders **Providers/delivers**: Other, Teacher, peers, professionals **Length**: 15 sessions **Duration**: 7-8 weeks **Intensity**: Two sessions per week, 40 min classroom sessions **Other details**: Eight intervention booster sessions delivered during 8th grade; 3 control sessions **Comparator**: Information only **Population details** **Inclusion**: Culturally focused approach targeted high-risk students. **Exclusion**: **Total** n= 757 (628 at PT) **Intervention**, NR **Comparator**, NR **Male** n (%) = 50.2% **Mean age (range)**: 14.96 at 2 year follow-up **Ethnicity**: 48% African-American, 37% Latino, 5% White, 3% Asian and 8% Other. **Baseline drinking behaviours**: 5.3% of sample reported drinking at baseline.	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Multiple regression **Unit of allocation:** Group (6 schools) **Unit of analysis:** Individual **Time to follow-up**: Post-test follow-up 4 months after pre-test and two years **Other details:** Alcohol frequency measured 9-point scale, alcohol consumed per drinking occasion measured on 6-point scale. **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: Low number of Black participants in control group. **Attrition** **Number of participants completing study**: n= 628 (98%) at PT, n=456 (60%) at 2 year follow-up **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** Intention to use beer or wine in the next year was significantly lower in both the LST group ($p<0.01$) and the CFI group ($p<0.01$) relative to the information only control group. Intentions to use hard liquor in the future were also significantly lower and for the LST group ($p<0.05$) and marginally lower for the CFI group ($p=0.06$) compared to the information only control group **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Current use (LST; CFI; IC). Adjusted means (SD not reported). Drinking frequency: 1.94; 1.61; 2.25 Drinking amount: 1.65, 1.42, 1.85 Drunkenness frequency: 1.40; 1.25; 1.64 Relative to the information only control condition, drinking frequency and drinking amount were significantly reduced by both the LST and CFI interventions ($p<0.0001$ for both outcomes, respectively). In addition, students in the CFI intervention group reporting drinking less frequently and consuming less alcohol than students in the LST intervention group ($p<0.003$ and $p<0.03$, respectively). Both interventions reduced the frequency of drunkenness compared to the control condition ($p<0.0002$), and students in the CFI group were drunk less often than those in the LST group ($p<0.04$).

Study details	Intervention and population details	Analyses	Results
Botvin et al (1997) NRCT - **Objective:** To test a cognitive-behavioural approach to drug abuse prevention to determine its effectiveness with inner-city minority youth. **Setting:** School, **Country:** USA **Funding source:** NR	**Intervention details** **Name**: Life Skills Training **Focus/aim**: Alcohol, tobacco and drugs **Programme type**: social skills training, drug resistance skills, normative education **Theoretical base**: NR **Key components**: Group discussion, demonstration, group modelling, behavioural rehearsal, feedback and reinforcement, and homework. **Providers/delivers**: Teachers, **Length**: 15 sessions **Duration**: NR **Intensity**: NR **Other details**: Teacher's manual with detailed lesson plans, student handouts and video material. Teachers attend a one-day training workshop. **Comparator**: Programme normally in place in New York City. **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 833 **Intervention**, n= NR **Comparator**, n= NR **Male** n (%): 47% **Mean age (range)**: 11-15 years **Ethnicity**: 25.8% African-American, 69.6% Hispanic, 0.7% White, 1.4% Asian, 1.5% Native American and 1.0% other. **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: GLM analyses **Unit of allocation:** Organisation/institution (7 junior high schools) **Unit of analysis:** Individual **Time to follow-up**: Post-test **Other details:** **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: Differences between conditions on race/ethnicity. **Attrition** **Number of participants completing study**: n=721 **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** Future intentions to drink beer or wine (p<0.01) within the next year, but not liquor, were lower in the intervention group compared to the control group [beer/wine: 1.78 (0.04) vs. 1.98 (0.06); liquor: 1.24 (0.03) vs. 1.28 (0.04)]. Intervention students had significantly lower normative expectations for adult and peer drinking (p=0.0060 and p=0.0001, respectively) and were more likely to use refusal skills (p=0.0114). There was no difference between groups in terms of anti-drinking attitudes **Personal and social skills** There was no difference between groups in terms of measures of skills use (decision-making, advertising, anxiety reduction, communication and social assertiveness). **Health and social outcomes related to alcohol and sexual health** Adjusted mean (SE) (intervention; control) Drinking index: 1.73 (0.05); 2.00 (0.07) Drinking amount: 1.43 (0.03); 1.62 (0.05) Drunkenness: 1.33 (0.04); 1.49 (0.06) Intervention students drank alcohol less often (p=0.0017) and consumed significantly less alcohol (p=0.0006) and got drunk significantly less often (p=0.0133) relative to control students.

Study details	Intervention and population details	Analyses	Results
Botvin et al (2001a; **2001b)** **Griffin et al (2003)** RCT (cluster) + **Objective:** The study was designed to test a cognitive-behavioural approach to drug abuse prevention in a large-scale randomised controlled trial. **Setting:** School, **Country:** USA **Funding source:** National Institute for Drug Abuse	**Intervention details** **Name**: Life Skills Training **Focus/aim**: Alcohol and drugs **Programme type**: resistance skills training, normative education, social skills training **Theoretical base**: NR. **Key components**: group discussion, demonstration, modelling, behavioural rehearsal, feedback and reinforcement, and homework. **Providers/delivers**: Teachers, **Length**: 15 sessions **Duration**: NR **Intensity**: NR **Other details**: 10 booster sessions delivered in 8th grade. Programme revised for minority groups through focus group testing and interviews. Intervention materials included teacher's manual, student hand outs, and video material. Teachers attended a one-day teacher training workshop. **Comparator**: Substance use curriculum normally in place in New York City schools. **Population details** **Inclusion**: Provided data at pre-test and post-test (7th grade), and the 1-year follow-up (8th grade). **Exclusion**: NR **Total** n= 3621 **Intervention**, n= 2144 **Comparator**, n= 1477 **Male** n (%) = 47% **Mean age (range)**: 12.9 years (7th grade) **Ethnicity**: 61% African American, 22% Hispanic, 6% Asian, 6% White and 5% mixed or other.	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) (Validated) **Statistical method(s) used to analyse data**: Generalized linear model, ANCOVA and generalised estimating equations independent method (GEE). Additional analyses conducted to control for intra-cluster correlations (ICCs). **Unit of allocation:** Organisation/ institution (29 schools) **Unit of analysis:** Organisation/ institution **Time to follow-up**: 3 month post-test and 1 year **Other details:** A dichotomous variable was created to identify students who reported that they typically drank 5 or more drinks per drinking occasion as binge drinkers. **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: More Black students in intervention group and more Hispanic students in control; higher proportion of students receiving free lunches in control **Attrition** **Number of participants completing study**: NR	**Knowledge and understanding** 3 months: Students in the intervention group reported greater drinking knowledge (p<0.0239) than controls. 1 year [mean (SE)]: Intervention participants reported greater drinking knowledge than control participants [48.2 (0.64) vs. 43.7 (0.80); p<0.0086]. [Botvin et al 2001] 1-year follow-up: Mean (SE) (intervention; control) Drinking knowledge (n=2631): 1.48 (0.01); 1.45 (0.01); p=0.0475 2-year follow-up: Mean (SE) (intervention; control) Drinking knowledge (n=2511): 1.48 (0.01); 1.48 (0.01); p=0.6091 **Attitudes and values** 3 months: Students in the intervention group had lower peer and adult normative expectations for drinking (p<0.0440 and p<0.0354, respectively). 1 year [mean (SE)]: Intervention participants had lower intentions to drink alcohol [1.85 (0.03) vs. 2.08 (0.03); p<0.0028], had more negative attitudes about drinking [86.9 (0.40) vs. 85.5 (0.50); p<0.0017] and reported lower normative expectations regarding drinking by peers and adults [2.99 (0.03) vs. 3.22 (0.03); p<0.0015 and 3.75 (0.03) vs. 3.87 (0.03); p<0.0122, respectively). [Botvin et al 2001] 1-year follow-up: Mean (SE) (intervention; control) Pro-drinking attitudes (n=2718): 1.52 (0.02); 1.59 (0.02); p=0.0170 Peer drinking norms (n=2869): 3.00 (0.02); 3.17 (0.04); p=0.0006 2-year follow-up: Mean (SE) (intervention; control) Pro-drinking attitudes (n=2576): 1.47 (0.02); 1.52 (0.02); p=0.1462 Peer drinking norms (n=2873): 3.30 (0.03); 3.41 (0.03); p=0.0151

	Baseline drinking behaviours: Mean (SE) (intervention; control) Drinking frequency: 1.54 (1.07); 1.52 (1.03) Drunkenness frequency: 1.07 (0.50); 1.07 (0.43) Drinking quantity: 1.35 (0.79); 1.37 (0.81)	**Reasons for non-completion**: NR	**Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** [Botvin et al 2001] The covariate-adjusted* proportion of binge drinkers (5 or more drinks on one occasion) at the 1-year follow-up was 4.3% in the control group and 1.8% in the intervention group. At the 2-year follow-up, the covariate-adjusted proportion of binge drinkers was 5.2% of the control group and 2.2% of the intervention group. *gender, race, free lunch, % of programme completes, baseline level of outcome variable. 3 months (PT): The intervention had significant effects on each of the alcohol use measures. Mean score for drinking frequency was lower in the intervention group than in the control group (p<0.042), as was the score for drunkenness frequency (p<0.007) and drinking quantity (p<0.033). When the ICCs were taken into account the differences in drinking frequency and quantity were non-significant (drunkenness p<0.0031). Mean (SE) at 1 year (intervention; control) Drinking frequency: 1.77 (0.03); 1.99 (0.04) Drunkenness frequency: 1.17 (0.02); 1.26 (0.03) Drinking quantity: 1.51 (0.02); 1.68 (0.03) Participants in the intervention group drank less frequently (p<0.0001; ICCs p<0.0098), got drunk less frequently (p<0.0040; ICCs p<0.0152) and consumed less than control participants (p<0.0007; ICCs p<0.0098). Binge drinking (logistic regression analyses) [#16 Botvin et al 2001] 1-year (8th grade): beta -0.90 (SE 0.42); OR 0.41* (95% CI 0.18, 0.93) 2-year (9th grade): beta -0.90 (SE 0.31); OR 0.40** (95% CI: 0.22, 0.74) *p<0.05; **p<0.01 [Griffin et al 2003] Adjusted means (SE) at 1-year follow-up for high-risk youth (intervention; control; n=802) Drinking (composite score of the mean of the frequency of drinking and drunkenness scores and quantity of drinking score): 1.82 (0.08); 2.11 (0.08); p=0.008

Study details	Intervention and population details	Analyses	Results
Brewer (1991) RCT (Individual) + **Objective:** Evaluation of Here's Looking at You social skills training **Setting:** School, **Country:** USA **Funding source:** NR	**<u>Intervention details</u>** **Name**: Here's Looking at You, 2000 curriculum **Focus/aim**: Decrease substance use **Programme type**: Social skills training **Theoretical base**: Problem Behaviour Theory; Social learning theory **Key components**: Curriculum, videotapes **Providers/delivers**: Certified school psychologist **Length**: 9 sessions **Duration**: 40 minutes **Intensity**: NR **Other details**: **Comparator**: Video tape of substance use; no intervention **<u>Population details</u>** **Inclusion**: NR **Exclusion**: NR **Total** n= 54 **Intervention**, n= 18 (33.3%) **Comparator**, n= 18 control (33.3%); 18 placebo (33.3%) **Male** n (%) = **Mean age (range)**: 10th grade **Ethnicity**: NR **Baseline drinking behaviours**: NR	**<u>Process details</u>** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANCOVA **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: Post test; 6 months **Other details:** **<u>Baseline comparability</u>** **Groups balanced at baseline:** Yes **Comments**: **<u>Attrition</u>** **Number of participants completing study**: **Reasons for non-completion**:	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** No main effect of intervention, or interactions with sex and prior use (raw data presented by gender and risk)

Study details	Intervention and population details	Analyses	Results
Caplan et al (1992) NRCT - **Objective:** To assess the impact of social competence training on skills, social adjustmernt, and self-reported substance use of sixth and seventh graders. **Setting:** School, **Country:** USA **Funding source:** Grant Foundation Faculty Scholars Program in Mental Health of Children	**Intervention details** **Name**: The Positive Youth Development Program **Focus/aim**: To develop social skills and resistence skills to reduce substance use **Programme type**: Social skills training and competence **Theoretical base**: Social skills training and competence **Key components**: The curriculum composed of six units: Stress management, self-esteem, problem solving, substances and health information, assertiveness and social networks. It was designed to promote students personal and social competence. Teaching techniques: Didactic instruction, class discussion, video tapes, diaries, role plays, work sheets and home work assignments. **Providers/delivers**: External, Health educators and teachers **Length**: 6 program classes **Duration**: 50 minutes **Intensity**: 15 weeks **Other details**: The Health Educators and Teachers received 2 hours of workshop training as well as weekly onsite consultation through the programs implementation **Comparator**: No intervention **Population details** **Inclusion**: Parental permission **Exclusion**: No parental permission **Total** n= 282 (95%) **Intervention**, n= Inner-city: 72; Suburban: 37 **Comparator**, n= Inner-city: 134; Suburban: 39 **Male** n (%) = Inner-city: 55%; Suburban: 54% **Mean age (range)**: (median age 12) Age range: 11-14 **Ethnicity**: Inner-city: 90% Black, 8% hispanic and 2% mixed ethnic origin; Suburban: 99% White and 1% hispanic **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/ Survey **Statistical method(s) used to analyse data**: MANOVA **Unit of allocation:** N/A **Unit of analysis:** Group **Time to follow-up**: Post test **Other details:** **Baseline comparability** **Groups balanced at baseline**: No **Comments**: Large differences in ethnicity between schools (however chi analysis showed that the program and control groups were comparable between program and control, the data is not presented though). More students from the Inner-city school particpated and there were more students in the control group. **Attrition** **Number of participants completing study**: **Reasons for non-completion**: Absence, invalid repsonses	**Knowledge and understanding** NR **Attitudes and values** The MANOVA assessing changes in students' general attitudes toward drinking yeilded no significant findings. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** The Condition X Time MANOVA assessing changes in self-reported excessive alcohol use was significant, $F(4,210) = 2.41$, $p<0.05$. Follow up ANOVAs indicated that control students, relative to intervention students, increased significantly in their frequency of having three or more drinks on a single occasion, $F(1,213) = 3.65$, $p<0.05$; frequecny of having to much to drink, $F(1,213) = 3.68$, $p<0.05$; and in the amount of beer, wine, or liquor they usually consumed on one occasion, $F(1,213) = 5.65$, $p<0.05$. Follow up univariate analysis indicated that the intentions of control students, relative to intervention students, increased significantly with respect to beer $F(1,218) = 3.75$, $p<0.05$, and hard liqour, $F(1,218 = 5.22$, $p<0.05$. This beneficial intervention effect also occurred against a significant increase in intentions to use wine ($p<0.05$) from pre and post assessemtn across both conditions

Study details	Intervention and population details	Analyses	Results
Clayton et al (1991) RCT (cluster) - **Objective:** Evaluation of DARE effect **Setting:** School **Country:** USA (Kentucky sample) **Funding source:** NIDA	**Intervention details** **Name**: DARE **Focus/aim**: **Programme type**: Psychosocial **Theoretical base**: social influence **Key components**: Resistance training, assertiveness **Providers/delivers**: Police officers **Length**: 16 weeks **Duration**: 1 hour **Intensity**: Once a week **Other details**: Students participate in a graduation ceremony upon completion of the programme. **Comparator**: Received the drugs unit of DARE within the science curriculum. **Population details** (based on post-test sample) **Inclusion**: **Exclusion**: **Total** n= 2,091 pre-tested (n=1,927 at post-test) **Intervention**, n= 1438 (74.7) **Comparator**, n= 487 (25.3) **Male** n (%) = 51% **Mean age (range)**: 11-12 years **Ethnicity**: 76% White; 21% Black **Baseline drinking behaviours**: (intervention; control) Lifetime: 32%; 26% Past year: 20.4%; 15.3% Past month: 10.6%; 5.4%	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANOVA on Standardised gain scores, controlling for race **Unit of allocation:** Organisation/ institution (31 schools) **Unit of analysis:** Individual **Time to follow-up**: Post test, 4 months from baseline **Other details:** None **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Significant differences in baseline drinking. Students in the DARE group reported significantly more alcohol use (lifetime, past year and past month) and less negative attitudes to substance use. **Attrition** **Number of participants completing study**: 1927 (92%) **Reasons for non-completion**: Moving out of area, changing schools, spoiled questionnaires	**Knowledge and understanding** NR **Attitudes and values** Students in the DARE group reported a significant increase in negative attitudes towards alcohol compared to students in the control group [change = -0.3 (0.454) vs. 0.082 (0.383), $p < 0.01$]. **Personal and social skills** There was no effect of DARE on self-esteem or peer-pressure resistance. **Health and social outcomes related to alcohol and sexual health** There was no significant difference between students who received the DARE programme and control students on any of the measures of alcohol use at post-test. Alcohol use at post-test – mean (SD) (intervention; control) Lifetime alcohol use White students: 0.066 (0.613); 0.094 (0.577) Non-white students: 0.049 (0.684); 0.093 (0.473) Past year alcohol use White students: 0.051 (0.513); 0.053 (0.452) Non-white students: 0.022 (0.469); 0.042 (0.336) Past month alcohol use White students: 0.025 (0.383); 0.022 (0.365) Non-white students: 0.025 (0.413); 0.030 (0.280)

Study details	Intervention and population details	Analyses	Results
Clayton et al (1996) RCT (cluster) - **Objective:** To evaluate the long-term effectiveness of Drug Abuse Resistance Education (DARE). **Setting:** School **Country:** USA (Lexington sample) **Funding source:** National Institute on Drug Abuse	**Intervention details** **Name**: Drug Abuse Resistance Education (DARE) **Focus/aim**: Alcohol, tobacco and drugs **Programme type**: Resistance Skills training, knowledge, decision-making skills, normative education **Theoretical base**: NR **Key components**: Curriculum, role play, homework, class discussion **Providers/delivers**: Police officers **Length**: 16 weeks (did not do session on gangs) **Duration**: 1 hour **Intensity**: Once a week **Other details**: DARE officers receive an 80-hour training course **Comparator**: various drug education programmes **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 2,071 students **Intervention**, n= 23 schools **Comparator**, n= 8 schools **Male**: 51% **Mean age (range)**: 6th grade (11 or 12 years) **Ethnicity**: 75% White, 22% African American, 2% 'other' **Baseline drinking behaviours**: ~30% had used alcohol at least once or twice.	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: T-tests, regression models **Unit of allocation:** Organisation/ institution (31 schools) **Unit of analysis:** Group **Time to follow-up**: 4 months after pre-test and each year until spring 1992 (5 years) **Other details:** For frequency of past year use, individuals were asked how many times they had drunk a full glass of alcohol (beer, wine, or liquor). Responses ranged from 0 times to 40 or more. **Baseline comparability** **Groups balanced at baseline:** No or NR **Comments**: Comparison schools had more African American students and a larger percentage of students who were eligible for the free or reduced lunch program. Significantly higher mean levels of past year alcohol use in treatment group ($p<0.05$). Alcohol users were more likely to have dropped out at the 9th and 10th grade follow-ups **Attrition** **Number of participants completing study**: 93% initially, but 45% lost at 5 year follow-up **Reasons for non-completion**: Parents did not grant permission, moved out of school district, absent on day of survey, students lost between schools. No difference in attrition between treatment and comparison group.	**Knowledge and understanding** NR **Attitudes and values** Significant intervention effects were found for students' general and specific drug attitudes, capability to resist peer pressure and estimated level of drug use among peers. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** No significant differences were observed between intervention and comparison schools regarding alcohol use in the 7th grade, one year after the project was delivered, or over the 5 year measurement interval.

Study details	Intervention and population details	Analyses	Results
Cuijpers et al (2001); Smit et al (2003) NRCT + **Objective:** To examine the effects of the 'Healthy School and Drugs project. **Setting:** School, **Country:** The Netherlands **Funding source:** NR	**Intervention details** **Name**: Healthy School and Drugs Project **Focus/aim**: Reduce substance use including alcohol **Programme type**: Behaviour change **Theoretical base**: Behaviour change **Key components**: educational lessons, activities, videos and brochures, refusal skills, increasing self-esteem **Providers/delivers**: Teachers, **Length**: 3 years **Duration**: NR **Intensity**: 3 lessons a year (2nd year covers alcohol) **Other details**: **Comparator**: Control group not allowed to conduct the 'Healthy Schools and Drugs' project during the following 3 year **Population details** **Inclusion**: Schools had an active committee coordinating the drug prevention activities in the school. Also had to conduct prevention activities at several levels. **Exclusion**: NR **Total** n= 1930 **Intervention**, n= 1156 (60%) **Comparator**, n= 774 (40%) **Male**: 49.1% **Mean age (range)**: 12.4 (SD = 0.5) **Ethnicity**: NR **Baseline drinking behaviours**: Proportion of users: experimental (E) 0.269 and control (C)	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: A series of multiple and logistic regression analyses **Unit of allocation:** Organisation/institution (School) **Unit of analysis:** Organisation/institution **Time to follow-up**: 1 year, 2 years and 3 years **Other details:** **Baseline comparability** **Groups balanced at baseline:** greater proportion of smokers; more positive smoking attitudes and lower alcohol self efficacy less marijuana knowledge in experimental group **Comments**: **Attrition** **Number of participants completing study**: 74% interviewed at all for measurement points **Reasons for non-completion**:	**Knowledge and understanding** Knowledge about alcohol M1 E 2.68(1.37) vs. C 2.69(1.31) (NS) M2 E 3.81(1.30) vs C 3.31(1.36) (p<0.001) M3 E 4.12(1.23) vs C 3.68(1.31) (p<0.001) **Attitudes and values** Attitude towards alcohol M1 E 11.59(4.01) vs C 11.71(3.68) (NS) M2 E 12.18(3.89) vs C 12.66 (3.93) (p < 0.05) M3 E 12.74 (3.78) vs C 13.09 (3.68) (NS) **Personal and social skills** Self-efficacy towards alcohol use M1 E 6.10(3.04) vs C 6.32 (2.93) (p<0.05) M2 E 6.44(3.23) vs C 6.66(3.33) (NS) M3 E 4.71(2.75) vs. C 4.67 (2.93) (NS) **Health and social outcomes related to alcohol and sexual health** Proportion who drink: One year post intervention (M1): E 0.328 vs. C 0.428 (p<0.05) Two years post intervention (M2): E 0.566 vs. C 0.654 (p<0.001) Three years post intervention (M3): E 0.738 vs. C 0.805 (p<0.001) Proportion of weekly users: M1 E 0.157 vs. C 0.188 (NS) M2 E 0.306 vs C 0.335(NS) M3 E 0.442 vs C 0.569 (p<0.05) Drinks/week (M; SD) M1 E 0.94 (2.06) vs. C 0.87 (1.61) (NS) M2 E 2.01 (4.16) vs C 2.52 (4.92) (NS) M3 E 4.06 (7.20) vs C 5.27 (7.57) (p < 0.001) Drinks/occasion (M; SD)

	0.318 Proportion of weekly users: E 0.120 and C 0.130 Drinks/week (M; SD): E 0.58 (1.57) and C 0.53 (2.08) Drink/occasion (M; SD): E 1.89 (2.06) and C 1.71 (1.26)		M1 E 1.96 (2.14) vs. C 2.10 (2.25) (p<0.001) M2 E 3.27 (3.47) vs. C 3.60 (3.82) (NS) M3 E 4.79 (4.30) and C 5.82 (5.78) (p<0.001) From Smit et al 2003: After adjusting for initial baseline differences in alcohol use, there were significant intervention effects on the prevalence of alcohol use. Lifetime alcohol prevalence (intervention; control) 1 year: 35.1%; 44.6%; p<0.05; OR=0.71 2 years: 57.0%; 65.3%; p<0.01; OR=0.75 3 years: 77.2%; 86.6%; p<0.05; OR=0.56 Multivariate logistic regression analysis showed that the effect of the intervention on alcohol use was less favourable in students who disliked school. A positive trend, bordering on significance, was found in those who perceived drinking as unhealthy.

Study details	Intervention and population details	Analyses	Results
Dedobbeleer and Desjardins (2001) NRCT - **Objective:** To examine an intervention aimed at preventing alcohol and other drug use **Setting:** School, family and community **Country:** Canada **Funding source:** Quebec Council of Social Research and the Quebec Ministry of Health and Social Services	**Intervention details** **Name**: The Coalition for Youth Quality of Life Project **Focus/aim**: Alcohol and other drug use **Programme type**: Resistance skills training **Theoretical base**: Refusal skills **Key components**: First year included youth educational programmes (Grades 6 and 8), parent education programs, alternatives programs, youth mobilization and support systems for youth in trouble. Youth educational programmes were stopped during the second year and the intervention was restricted to parent education programme and community development. The third year of the programme focused on high-risk youth. Interventions included competence enhancement programmes, parent education programme, and development of alternatives and youth mobilization. **Providers/delivers**: Teachers, community taskforce **Length**: NR **Duration**: NR **Intensity**: NR **Other details**: None **Comparator**: No intervention **Population details** **Inclusion**: NR **Exclusion**: Students with learning disabilities and students in French immersion classes **Total** n= 791 **Intervention**: 4 schools **Comparator:** 6 schools **Male**: Grade 6 (I 52.9%, C 51.9%); Grade 8 (I 56% and C 57.8%)	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Chi-square, logistic regression analysis and ANOVA **Unit of allocation:** Organisation/institution (10 schools) **Unit of analysis:** Group **Time to follow-up**: 18 months and 30 months **Other details:** Frequency of alcohol use was assessed by two questions about students' use of beer, wine and spirits on a 7-point scale. Frequency of alcohol misuse was measured using items of three scales: overindulgence, trouble with peers, and trouble with adults. **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Frequency of drinking alcohol and amount of alcohol consumed per typical occasion in the last 12 months were significantly lower in the Grade 6 participants in the intervention group **Attrition** **Number of participants completing**	**Knowledge and understanding** No effect on awareness of drug and alcohol problems. **Attitudes and values** No effect on intentions to become involved in prevention activities. **Personal and social skills** Grade 6 students in the intervention group reported significantly greater changes scores on the measure of self-esteem and reported a better relationship with their fathers than control students at the 10-month follow-up (both $p<0.05$). No effect on relationship with mother. **Health and social outcomes related to alcohol and sexual health** No statistically significant differences between sixth grade students in terms of alcohol drinking frequency or alcohol consumed per typical occasion at either follow-up. Eighth graders in the intervention group reported significantly higher alcohol drinking frequency at the 30-month follow-up ($p<0.05$) and a higher amount of alcohol consumed per typical occasion at the 10- and 30-month follow-ups (both $p<0.05$). When pre-test differences were controlled for there was no significant difference between groups, except that Grade 8 intervention students were less likely to be nonusers than control students at the 30-month follow-up. Adjusted ORs (95% CI) for mean changes in alcohol use (Grade 6; Grade 8) Frequency of use (12 months) Baseline to 10 months: 1.28 (0.55, 2.96); 0.46 (0.21, 1.01) 10 months to 30 months: 1.20 (0.46, 3.18); 0.34 (0.12, 0.97) Number of drinks Baseline to 10 months: 1.04 (0.46, 2.38); 0.48 (0.21, 1.08) 10 months to 30 months: 1.52 (0.60, 3.85); 0.51 (0.20, 1.32)

	Mean age (range): Grade 6 (I 11.6 & C 12.1); Grade 8 (I 13.7 & C 14.1) **Ethnicity**: NR **Baseline drinking behaviours** Grade 6: 23.8% and 42.6% of intervention and control students, respectively, had tried alcohol in the previous 12 months; Grade 8: 40% in both groups had tried alcohol in the previous 12 months.	**study**: n=320 (40%) provided data at the second post-test **Reasons for non-completion**: Grade 8 students not completing the pre-test drank alcohol more frequently per month, and drank more glasses per occasion.	

Study details	Intervention and population details	Analyses	Results
Dent et al (2001) RCT (cluster) - **Objective:** To examine the generalisability of a successful class room based prevention program, to general senior high school youth **Setting:** School, **Country:** USA **Funding source:** NR	**Intervention details** **Name**: Project Towards No Drug Use **Focus/aim**: Prevention of drug use including alcohol **Programme type**: Social skills training **Theoretical base**: Development of decision skills **Key components**: Class room based drug abuse prevention; skills to change: effective listening skills, effective communication skills and self control skills. In conjunction with myths about drug use, the nature and consequences of drug use, effects of drug use on others and decision making skills. **Providers/delivers**: Teachers, **Length**: 3 weeks (nine sessions overall) **Duration**: 50 minutes per week **Intensity**: Three sessions **Other details**: **Comparator**: 13 Classes selected from the three schools to receive no intervention **Population details** **Inclusion**: Classes conducted throughout the day (periods 2-6), from general public high schools in Los Angeles. **Exclusion**: Twelfth grade students were not included to allow for in school 1 yr follow up. **Total** n= 1208 **Intervention**, n= 13 classes **Comparator**, n= 13 classes **Male** n (%) = 47% **Mean age (range)**: 14-17 years **Ethnicity**: 34% white, 38% Latino, 26% African American and 2% 'other'. **Baseline drinking behaviours**: 30 day alcohol use was 38%	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: For drug use measures t tests. For demographic variables chi-square tests were performed. ANOVA test for condition comparability. **Unit of allocation:** Group (classroom) **Unit of analysis:** Group (classes) **Time to follow-up**: 1 year (13 months after the pre-test assessment) **Other details:** Classes **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: **Attrition** **Number of participants completing study**: Follow up, n=679 (63%) **Reasons for non-completion**: Failure to obtain parental consent for measurement and loss of subjects to 1yr follow up.	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Significant interaction between pre-test use level and condition Alcohol ($F(1, 24) = 3.77$, $P<0.05$. At higher pre-test alcohol use, the program condition students exhibit lower alcohol use at 1yr follow compared to the control. There appeared to be no effect of the programme among pre-test nonusers and lower levels of use.

Study details	Intervention and population details	Analyses	Results
Dukes et al (1996; **1997)** CBA - **Objective:** Three and 6 year follow up of DARE **Setting:** School **Country:** USA **Funding source:** Colorado Springs school and police boards	**Intervention details** **Name**: D.A.R.E. **Focus/aim**: Alcohol and drug use **Programme type**: resistance skills **Theoretical base**: NR **Key components**: NR **Providers/delivers**: NR **Length**: NR **Duration**: 17 weeks **Intensity**: NR **Other details**: None **Comparator**: Delayed intervention **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 849 **Intervention**, n= 497 (59%) **Comparator**, n= 352 (41%) **Male**: NR **Mean age (range)**: 5th or 6th grade **Ethnicity**: NR **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Structural equation modelling **Unit of allocation:** Organisation/ institution (38 schools) **Unit of analysis:** Individual **Time to follow-up**: 3 years, 6 years **Other details:** None **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: Data not shown. **Attrition** **Number of participants completing study**: n=849. A total of 940 students were eligible for inclusion. **Reasons for non-completion**: Surveys sent to random sample of population in eligible schools. Students excluded because they did not indicate whether they had received DARE, incorrectly stated they had received a fictitious programme or responded incorrectly.	**Knowledge and understanding** NR **Attitudes and values** Results of 3-year follow-up: There was no difference between students who received D.A.R.E. and those who did not in terms of pro drug use attitudes. or resistance to peer pressure. **Personal and social skills** There was no difference between students who received D.A.R.E. and those who did not in terms of resistance to peer pressure. **Health and social outcomes related to alcohol and sexual health** *Results of 3-year follow-up* Overall, there was no difference between students who received D.A.R.E. and those who did not in terms of alcohol use or start age of alcohol use. Means (SD) of measured variables (DARE, control): Alcohol use Sample 1: 2.68 (1.71); 2.59(1.75) Sample 2: 260 (1.63); 2.46 (1.51) Alcohol onset (start age of alcohol use) Sample 1: 2.46(2.18); 2.43(2.12) Sample 2: 2.52 (2.04); 2.23 (2.10) *Results of 6-year follow-up* Six effects were not shown for alcohol use.

Study details	Intervention and population details	Analyses	Results
Eisen et al (2002) RCT (cluster) + **Objective:** To determine whether the SFA programme had the following drug-related effects: (1) to prevent or significantly delay the initiation of 'gateway' drug use during the study period, (2) to reduce the amount or frequency of substance used among those who do initiate use before or during the study period, and (3) to prevent or delay the progression to more ''advanced'' substance use (e.g binge drinking, regular smoking, and regular marijuana use) or to ''hard'' drug use following initiation, relative to control schools' usual drug prevention programming. **Setting:** School, **Country:** USA **Funding source:** National Institute on Drug Abuse	**Intervention details** **Name**: Lions Quest 'Skills for Adolescence' **Focus/aim**: Alcohol, tobacco and cannabis **Programme type**: Social competency, refusal skills training **Theoretical base**: NR **Key components**: 40 session curriculum **Providers/delivers**: External, **Length**: 40 sessions **Duration**: 35-45 min per session **Intensity**: Over 1 year **Other details**: Teachers attended a 3-day workshop conducted by Quest International certified trainers and provided with teacher manuals and student workbooks. **Comparator**: Usual drug prevention programmes **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 7,426 **Intervention**, n= NR **Comparator**, n= NR **Male**: 48.3% **Mean age (range)**: 51.1% aged 11, 45.0% aged 12, 3.1% 13-14 yrs **Ethnicity**: Asian American 7.1%; American Indian 1.4%; African American 17.6%, Hispanic American 33.9%; White 25.7%, Other/mixed	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Mixed model regression procedures **Unit of allocation:** Organisation/institution (34 schools) **Unit of analysis:** Organisation/institution **Time to follow-up**: PT at 1 year **Other details:** **Baseline comparability** **Groups balanced at baseline:** No or NR **Comments**: **Attrition** **Number of participants completing study**: n= 6,239 (84%) **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** BASELINE NONUSERS Adjusted alcohol use prevalence rates (%) at Spring 1999 posttest follow-up Lifetime: SFA 29.61; control 30.19; Difference -0.58 (95% CI -3.11, 4.27); p=0.75 30-Day: SFA 7.17; control 7.25; Difference -0.08 (95% CI -2.33, 1.57); p=0.92 Binge drinking (3+) 30-day: SFA 3.15; control 3.58; Difference -0.43 (95% CI -1.91, 0.66); p=0.5 There were no SFA program (main) effects for any of the alcohol use indicators for baseline nonusers. However, there were significant treatment Group X Ethnicity interactions on three drinking behaviours (lifetime alcohol use p=0.05; recent alcohol use, p=0.007; and recent binge drinking, p=0.004). The (significant) interaction pattern was similar on each of these measures: fewer Hispanic Americans in the SFA schools engaged in these drinking behaviours than Hispanic Americans in control schools, while there were no differences in prevalence rates between conditions for non-Hispanics BASELINE ALCOHOL USERS (n=327) Adjusted advanced alcohol use prevalence rates (%) Spring 1999 posttest follow-up

	14.2% **Baseline drinking behaviours**: Used alcohol in last 30 days: Yes 9.5%; No 90.1%		To: binge drinking From: Alcohol 30-day*: SFA 16.98; control 20.45; Difference -3.47 (95% CI -15.07, 8.14); p=0.55 There were there no significant differences between SFA and control students at posttest on any of the alcohol use measures.

Study details	Intervention and population details	Analyses	Results
Eisen et al (2003) RCT (cluster) + **Objective:** Evaluate Skills for Adolescence **Setting:** School, **Country:** USA **Funding source:** National Institute on Drug Abuse	**Intervention details** **Name**: Lions-Quest 'Skills for Adolescence' **Focus/aim**: To reduce substance use **Programme type**: Refusal skills, resistance skills, knowledge **Theoretical base**: Social influences and social cognitive approach **Key components**: Dedicated drug education unit, curriculum **Providers/delivers**: Teachers, **Length**: 40 session **Duration**: 35-45 minutes **Intensity**: NR **Other details**: **Comparator**: Usual drug education programme (ranged from school assemblies to DARE) **Population details** **Inclusion**: Contained grades 6-8 or 7-9. Had enrolment of at least 200 students by the end of the 8th or 9th grade. Was not using SFA at the time. **Exclusion**: NR **Total** n= 7426 **Intervention**, n= NR **Comparator**, n= NR **Male**: 48% **Mean age (range)**: 0.5% younger than 11, 51.1% 11, 45% 12, 2.9% 13, 0.2% 14/. **Ethnicity**: 7.1% Asian American 1.4% American Indian, 17.6% African American, 33.9% Hispanic American, 25.7% White, 639% Combination, 6.3 other. **Baseline drinking behaviours**: Used alcohol in last 30 days: Y: 703 (9.5%), N: 6687 (90.1%), Missing: 34(0.5%)	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Mixed model regression **Unit of allocation:** Organisation/institution (Schools) **Unit of analysis:** Group **Time to follow-up**: One year post test data collected, and then one year follow-up data **Other details:** Behavioural intentions 1=definitely yes to 4=definitely no. Harm of substances rated on whether they help harm health, ability to relax and popularity (1=very helpful, 4=very harmful). Looking at peer use 1=all, 5=none. Refusal skills measured using separate 3-item scales (alphas=.87-.92). **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: Pairs matched in each district on prevalence of any recent substance use and parent consent rates. **Attrition** **Number of participants completing study**: 5,691 (77% of those completing 6th grade survey) **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** Behavioural intention to drink alcohol: SFA mean 3.11, SE 0.04. Control mean 3.12, SE 0.04. p= 0.865 Perceived harm: SFA mean 11.79, SE 0.14. Control mean 11.80, SE 0.15. P .942 Perceived peer use: SFA mean 3.90, SE 0.05. Control mean 3.89, SE 0.06. P .859 **Personal and social skills** Refusal efficacy: SFA mean 4.48, SE 0.06. Control mean 4.65, SE 0.06. P .044 **Health and social outcomes related to alcohol and sexual health** Percentage of students who have drunk alcohol during their lifetime: SFA 66.97, Control 66.33, Difference 0.64, 95%CI -2.25 3.53, p= 0.66 Consumption in last 30 days: SFA 22.85, Control 23.18, Difference -0.33, 95%CI -3.01 2.35, p= 0.8 Binge drinking (3+) in last 30 days SFA 12.67, Control 13.11, Difference -0.44, 95%CI -2.78 1.91, p= 0.71 Baseline binge drinkers in SFA schools were less likely to report recent binge drinking at the end of the eighth grade (27%) than students in control schools (37%, p<0.01); there were no treatment differences among baseline non-binge drinkers (SFA=12%, control=12%).

Study details	Intervention and population details	Analyses	Results
Ellickson et al (1990) RCT (cluster) + **Objective:** To assess the long term gains for drug use preventions programs targeted at young adolescents **Setting:** School, **Country:** USA **Funding source:** Conrad N. Hilton Foundation	**Intervention details** **Name**: Project ALERT **Focus/aim**: Alcohol, tobacco and cannabis **Programme type**: Social Influence Program **Theoretical base**: Health Belief Model, social efficacy theory of behaviour change **Key components**: Two intervention conditions: (1) programme taught by adult health educator; or (2) programme taught by adult teachers assisted by teen leaders. Components of the programme included question and answer exercises, small group exercises and role modelling, and repeated skills practice. **Providers/delivers**: (1) Adult Health Educators, (2) Teen leaders **Length**: 2-year curriculum, 8 lessons in 7th grade, 3 booster sessions in 8th grade. **Duration**: one classroom period **Intensity**: weekly **Other details**: **Comparator**: Schools did not deliver the project ALERT curriculum. However schools were allowed to deliver existing prevention programs. **Population details** **Inclusion**: 7th graders in schools, drawn from 8 school districts in the northern and southern regions of California and Oregon. **Exclusion**: NR **Total** n= 30 schools, 6,527 students **Intervention**, n= 20 schools **Comparator**, n= 10 schools **Male** n (%) = 52% **Mean age (range)**: Grade 7, at baseline **Ethnicity**: 67% white, 10% Hispanic, 10% Black, 8% Asian, 5% Indian/mixed. **Baseline drinking behaviours**: 77% reported ever using	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: means, regression, within school correlations **Unit of allocation:** Organisation/ institution (30 schools) **Unit of analysis:** Individual (Data adjusted for within-school correlation) **Time to follow-up**: 3 months (after 7th grade curriculum), 12 months (before 8th grade booster sessions), and 15 months (after 8th grade booster sessions) **Other details:** Students divided into 3 risk levels: nonusers, experimenters (ever, but fewer than 3 times in the year before baseline and not in the month before baseline) and users (3 or more times in the past year or any use in the past month). **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: Data not reported but authors state that intervention students reported high intentions to use substances in the future. **Attrition** **Number of participants completing study**: n= 3,852 (60%) **Reasons for non-completion**: Approximately 18% lost because they had moved, 22% were absent or failed to supply	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Among baseline non-drinkers, the curriculum reduced the number who initiated alcohol use in the subsequent 3 months by 28% (p=0.04) and cut past month drinking (p=0.02). The programme also produced reductions among experimenters and users but the results did not reach significance. Between grades 7 and 8, student exposure to alcohol use greatly increased and there was no difference between intervention and control students on any measure of alcohol use at the 12- and 15-month follow-ups, with the exception of students in the teen leaders condition. Students in the teen leader condition reported significantly more alcohol use in the past month compared to controls at the 12-month follow-up (p<0.05). Program Effects on Alcohol Use (3, 12, 15 months) Non-users (% of 953) Ever: Teen Leader 16.3**, 47.4, 57.2; Health educator 18.0, 45.5, 53.7; Control 22.8, 50.0, 57.8 In Past month: Teen Leader 5.9**, 14.4, 22.0; Health educator 8.0, 10.5, 18.8; Control 10.8, 14.6, 19.8 Alcohol experimenters (% of 1795) In past month: Teen leader 20.9, 37.9**, 44.2; Health educator 22.3, 33.0, 42.1; Control 25.1, 31.1, 45.1 Monthly: Teen leader 3.4*, 15.1, 19.0; Health educator 5.6, 13.8, 17.6; Control 6.0, 12.8, 20.0 Weekly (6+ days in past month): Teen leader -, 2.4, 4.1; Health educator -, 2.2, 3.6; Control -, 3.8, 3.0

	alcohol.	relevant data at one or more occasions.	Quit (no use in past year): Teen leader -, 32.8, 32.0; Health educator -, 35.0, 28.8; Control -, 33.7, 29.9 Further analyses presented in Bell et al 1993 confirmed that the programme did not have any effects on alcohol use in Grade 9.

Study details	Intervention and population details	Analyses	Results
Ellickson et al (2003) RCT (cluster) + **Objective:** To evaluate Project ALERT. **Setting:** School + other, Parental involvement **Country:** USA **Funding source:** National Institute on Drug Abuse, BEST Foundation for a Drug-Free Tomorrow	**Intervention details** **Name**: Project ALERT (revised) **Focus/aim**: To reduce substance use, change beliefs **Programme type**: normative education, social influence programme, resistance skills training **Theoretical base**: Social influence model, Health belief model, Social learning model and self-efficacy theory of behaviour **Key components**: Uses games, small-group activities, question and answer techniques. Parental involvement via adolescent interviews, parent/child drug IQ tests. **Providers/delivers**: Teachers, **Length**: 14 lessons (11 in 7th grade and 3 in 8th grade) **Duration**: NR **Intensity**: NR **Other details**: 1 treatment group received booster lessons in the 9th and 10th grades (does not say how many). The impact of this is not reported on. **Comparator**: Control = other prevention curricula already in place **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 5412, 4689 at baseline, 4276 included in the analysis. **Intervention**, n= 2553 **Comparator**, n= 1723 **Male** n (%) = 50% in control, 52.1% in intervention **Mean age (range)**: 7th and 8th grade **Ethnicity**: 12.5% were non-white (largely Native American) **Baseline drinking behaviours**: 61.7% had already tried alcohol in the control, 60.8% in project alert.	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: estimated logarithm of odds ratio, chi squared, Bayesian model **Unit of allocation:** Organisation/ institution (School) **Unit of analysis:** Individual **Time to follow-up**: 18 months later **Other details: T**hree alcohol misuse scales: 1) alcohol-related consequences (sum of 5 dichotomous variables indicating that the student had experienced the following problems because of drinking alcohol: getting sick, getting in a physical fight, getting in trouble at school, getting in trouble at home, doing something s/he later regretted); 2) high risk drinking (sum of 3 dichotomous variables: binge drinking in the past month, polydrug use of alcohol and marijuana in the past year, weekly drinking); and 3) overall misuse (sum of the above 8 variables). **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: Matched according to community size and type (city, town, rural, community) **Attrition** **Number of participants completing study**: 4276 (79%) **Reasons for non-completion**: Some students did	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Students assigned to intervention schools had significantly lower overall alcohol misuse scores than did those in the control schools (P<0.05). Effects on overall alcohol misuse 18 months after baseline Baseline nonusers/low risk (never used alcohol at baseline): ALERT%: 0.22. Control: 0.3 Baseline experimenters/moderate risk (had used alcohol at baseline but less than 3 times in the last year and not in the last month): ALERT%: 0.64. Control: 0.65 Baseline users/high risk (students who had used alcohol three or more times in the past year or in the past month): ALERT%: 1.78*. Control: 2.23 *P<.05 The program did not curb current alcohol use or initiation, although the differences favoured the treatment group. Students assigned to ALERT schools were significantly less likely to engage in drinking that resulted in negative consequences (P<.04) and marginally less likely to engage in multiple forms of high risk drinking (P<.10).

		not complete the surveys because of a lack of parental permission, some were absent, some refused to participate, moved and could not be tracked. Those who were lost to attrition tended to be those more at risk of substance use. Also 2 school districts dropped out but they were replaced with schools in a similar region and similar ethnic composition.	

Study details	Intervention and population details	Analyses	Results
Ennett et al (1994) NRCT + **Objective:** To present the results of an evaluation of Project DARE. **Setting:** School, **Country:** USA (Illinois sample) **Funding source:** NIDA, Illinois Police, US Department of Health and Human Services	**Intervention details** **Name**: D.A.R.E. **Focus/aim**: Reduce drug use, increase positive attitudes to police, decrease positive drug attitudes **Programme type**: Resistance skills **Theoretical base**: social influence **Key components**: core DARE components **Providers/delivers**: Police officers **Length**: 17 sessions **Duration**: 1 hr **Intensity**: weekly **Other details**: None **Comparator**: No intervention **Population details** **Inclusion**: Participants who provided data at all 4 follow-ups. **Exclusion**: NR **Total** n= 36 schools (1,803 pupils) **Intervention**, n= 18 schools **Comparator**, n= 18 schools **Male**: 51% **Mean age (range)**: 10-11 years **Ethnicity**: 54% White; 22% African American; 9% Hispanic **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Logistic regression **Unit of allocation:** Organisation/ institution (School) **Unit of analysis:** School, analyses took into account the correlations among participants in the same school. **Time to follow-up**: Posttest following implementation, 1 yr from baseline and 2 years from baseline **Other details:** The sample for analyses included participants who provided data at all four data collection points. **Baseline comparability** **Groups balanced at baseline:** No or NR **Comments**: More DARE students in fifth grade. Authors adjusted for baseline differences in the analyses. **Attrition** **Number of participants completing study**: n=1,334 (74%) **Reasons for non-completion**: Not being present for one or two of the three post-tests. No difference in attrition between groups.	**Knowledge and understanding** NR **Attitudes and values** DARE had no effects on any of the other variables measuring students' attitudes towards drugs. **Personal and social skills** At immediate posttest, DARE had a significant effect on participant's self esteem, but no effects on any of the other variables measuring students' social skills. There were no effects of DARE on any social or psychological outcome at 1- or 2-year follow-ups. **Health and social outcomes related to alcohol and sexual health** Adjusted odds ratios (95% CI) for logistic regression Initiation of alcohol use Wave 2: 1.16 (0.66, 2.05) Wave 3: 0.88 (0.54, 1.43) Wave 4: 0.84 (0.47, 1.51) Increase in alcohol use (wave 2; wave 3; wave 4) Rural: 0.49 (0.29, 0.84)*; 0.98 (0.52, 1.86); 0.64 (0.33, 1.26) Suburban: 1.13 (0.79, 1.62); 1.14 (0.46, 2.79); 0.95 (0.45, 2.02) Urban: 1.28 (0.675, 2.18); 1.67 (0.84, 3.35); 1.01 (0.40, 2.54) Heavy drinking Wave 2: 1.08 (0.46, 2.52) Wave 3: 1.28 (0.68, 2.43) Wave 4: 1.29 (0.59, 2.99) Quitting alcohol Wave 2: 0.87 (0.48, 1.56) Wave 3: 1.27 (0.89, 1.83) Wave 4: 0.87 (0.52, 1.44) *p<0.05 DARE had significant effects on increased alcohol use for rural students at the immediate posttest, but these effects were not sustained at subsequent follow-ups.

Study details	Intervention and population details	Analyses	Results
Fearnow-Kenney et al (2003) RCT (cluster) - **Objective:** To conduct an initial, exploratory evaluation of All Stars, Sr. to examine programme effects on drug use as well as mediating variables. **Setting:** School, **Country:** USA **Funding source:** NR	**Intervention details** **Name**: All Stars Senior **Focus/aim**: General health including substance use **Programme type**: normative education, resistance and social skills training **Theoretical base**: NR **Key components**: Health education **Providers/delivers**: Teachers, **Length**: NR **Duration**: NR **Intensity**: minimum of 2 activities per week **Other details**: Teachers given 2 days of training. Selection of activities and the time of implementation were left to the discretion of the teacher. However, the researchers considered certain activities to be essential to programme success. 60-75% of the 67 available activities were implemented. **Comparator**: NR **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 653 **Intervention**, n= 406 **Comparator**, n= 247 **Male** n (%) = 153 (38%); 110 (45%) **Mean age (range)**: 13-19; 13-18 years **Ethnicity**: 46.2%; 53.6% White, 44.2%; 27.8% African American, 1.9%; 7.9% Asian, 1.4%; 2.0% Hispanic, 1.2%; 2.4% Native American, 5.1%; 6.3% Other. **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Multiple regression analyses **Unit of allocation:** Organisation/institution (6 schools) **Unit of analysis:** Individual **Time to follow-up**: PT **Other details:** **Baseline comparability** **Groups balanced at baseline:** No or NR **Comments**: Difference in ethnicity between groups **Attrition** **Number of participants completing study**: 17.6% (intervention) and 16.8% (control) dropped out **Reasons for non-completion**: Drop outs slightly older	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Students who received the intervention were no more or less likely to report drunkenness in the last 30 days than control students (OR 0.57 CI*: 0.31, 1.05; p=0.07) *NR whether 99% or 95%

Study details	Intervention and population details	Analyses	Results
Fraguela et al (2003) NRCT - **Objective:** To evaluate the effects of the LST programme on drug consumption. **Setting:** School, **Country:** Spain **Funding source:** NR	**Intervention details** **Name**: Life Skills Training **Focus/aim**: Alcohol, tobacco and cannabis **Programme type**: self-esteem, decision-making, social skills training **Theoretical base**: NR **Key components**: same as original programme with an additional component focusing on leisure activities **Providers/delivers**: Other, Teacher or member of research team **Length**: 16 session **Duration**: 45-50 mins **Intensity**: **Other details**: Nine booster sessions delivered (not stated when). **Comparator**: "No intervention" **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1029 **Intervention**, n= (1) 235; (2) 309 **Comparator**, n= 485 **Male** n (%) = 42.4% **Mean age (range)**: 14.32 (14-16) years **Ethnicity**: NR **Baseline drinking behaviours**: Consumption at baseline (teachers; research; control) Beer (monthly): 0.39 (0.76); 0.37 (0.82); 0.37 (0.77) Spirits (monthly): 0.36 (0.72); 0.39 (0.79); 0.36 (0.75)	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANOVA **Unit of allocation:** Group (30 classes) **Unit of analysis:** Individual **Time to follow-up**: PT at 3 months, 1 yr, 2 yrs and 3yrs **Other details:** Beer and spirit consumption in the previous month measured on 5 point scale **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: **Attrition** **Number of participants completing study**: ranged from 80-90% at PT to 40-36% at 3 yrs **Reasons for non-completion**: Students leaving school, moving to another school, absence. NS across intervention groups	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Mean (SD) consumption (research; teacher; control) Beer (monthly) 1: 0.38 (0.74); 0.45 (0.78); 0.48 (0.88) 2: 0.64 (0.86); 0.67 (0.81); 0.85 (0.97) p<0.01 3: 0.54 (0.86); 0.63 (0.86); 0.52 (0.83) 4: 0.50 (0.84); 0.54 (0.92); 0.65 (0.09) Spirits (monthly) 1: 0.37 (0.67); 0.46 (0.81); 0.42 (0.80) 2: 0.67 (0.81); 0.58 (0.78); 0.79 (0.94) p<0.03 3: 0.76 (0.91); 0.81 (0.85); 0.74 (0.81) 4: 0.69 (0.87); 0.74 (0.90); 0.76 (0.85) Students in the researcher-led intervention group reported significantly lower consumption of beer than control students at the 2nd follow-up (p value not reported). In addition, teacher-led intervention students reported significantly lower consumption of spirits, relative to control students, at the 2nd follow-up (p value not reported). There was no significant difference between intervention and control students in terms of beer or spirit consumption at any of the other follow-ups.

Study details	Intervention and population details	Analyses	Results
Graham et al (1990) RCT (cluster) + **Objective:** One year follow up of 3 cohorts of Project SMART **Setting:** School, **Country:** USA **Funding source:** NIDA	**Intervention details** **Name**: Project SMART (Self-Management and Resistance Training) **Focus/aim**: Alcohol and drugs **Programme type**: Social skills, affective education **Theoretical base**: NR **Key components**: (1) Social skills programme or (2) affect management programme **Providers/delivers**: Health educators **Length**: (1) 12 sessions; (2) 12 sessions **Duration**: NR **Intensity**: NR **Other details**: None **Comparator**: Normal curriculum provided in school **Population details** **Inclusion**: Students who received the programme as seventh graders. **Exclusion**: NR **Total** n= 16 schools (5,070 students) **Intervention**, (1) n= 6 schools; (2) n= 6 schools **Comparator**, n= 12 schools **Male**: NR **Mean age (range)**: 12 years **Ethnicity**: 43% White; 31% Hispanic; 20% Black; 6% Asian **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANCOVA **Unit of allocation:** Organisation/ institution (16 schools) **Unit of analysis:** Individual **Time to follow-up**: 1 year **Other details:** Alcohol use index based on 4 items: number of alcoholic drinks in lifetime, number of drinks in the past 30 days, number of drinks in the past 7 days, and number of days in the previous 30 days the person drank alcohol. **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: No details reported **Attrition** **Number of participants completing study**: 70% **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** The programme had significant effects on the alcohol use index (p=0.03). The programme effect was strongest for Asian students, with Hispanic, Black and White students successively less affected by the programme. Alcohol use index: Significant main effects of ethnicity ($p < 0.001$); sex ($p < 0.05$); Intervention status ($p < 0.05$) Significant interaction effects between ethnicity and sex ($p < 0.01$) Simple programme effect in females ($p < 0.05$)

Study details	Intervention and population details	Analyses	Results
Harmon (1993) CBA + **Objective:** To determine if participating in the DARE programme had any effect on measured outcome variables. **Setting:** School **Country:** USA **Funding source:** Office of Educational Research and Improvement, US Department of Education, Centre for Research on Effective Schooling for Disadvantaged Students	**Intervention details** **Name**: DARE **Focus/aim**: Reduce substance use, foster negative substance attitudes **Programme type**: Resistance skills **Theoretical base**: **Key components**: Core DARE curriculum **Providers/delivers**: External, Police **Length**: 17 weeks **Duration**: 1 hour **Intensity**: Weekly **Other details**: **Comparator**: None **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 708 **Intervention**, n= 341 (48.2%) **Comparator**, n= 367 (51.8%) **Male** n (%) = 45% DARE 54% comparison **Mean age (range)**: 10.3 **Ethnicity**: 59% white DARE, 44% comparison **Baseline drinking behaviours**: Mean (SD) (DARE; control) Past year alcohol use: 0.08 (0.27); 0.06 (0.23) Past month alcohol use: 0.11 (0.41); 0.09 (0.35)	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANCOVA **Unit of allocation:** Organisation/ institution (11 schools) **Unit of analysis:** Individual **Time to follow-up**: 20 weeks **Other details:** "You and Your School" questionnaire was used to measure DARE objectives and other factors associated with later drug use. **Baseline comparability** **Groups balanced at baseline:** No **Comments**: DARE group had significantly more female students and more White students than the comparison group. In addition, more DARE students reported smoking in the last year; they were less attached to school and believed less in pro-social norms. **Attrition** **Number of participants completing study**: 602 (85.0%) **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** DARE students reported higher levels of belief in pro-social norms ($p<0.01$), reported less association with drug using peers ($p<0.01$), felt more of the peer associations were positive or pro-social ($p<0.05$) and had more negative attitudes towards substances ($p<0.001$). Compared to controls, DARE had no effect on items targeting attitudes about the police, commitment and attachment to school. **Personal and social skills** DARE students were more assertive ($p<0.05$) than control students. Compared to controls, DARE had no effect on items targeting coping strategies, social integration, rebellious behaviour or self esteem. **Health and social outcomes related to alcohol and sexual health** After controlling for pre-existing differences and the dependent variable at pre-test, DARE students reported less alcohol use in the last year than control students ($p < 0.05$). However, DARE and control students did not differ significantly in terms of the frequency of alcohol use in the past month. Alcohol use at posttest – mean (SD) (DARE, control) Past year: 0.10 (0.32; 0.13 (0.33) Past month: 0.13 (0.49); 0.17 (0.52)

Study details	Intervention and population details	Analyses	Results
Hecht et al (2003); Gosin et al (2003) RCT (cluster) - **Objective:** To evaluate the effectiveness of a culturally-grounded intervention in influencing anti-drug attitudes and reducing adolescent substance use **Setting:** School, **Country:** USA **Funding source:** National Institute on Drug Abuse	**Intervention details** **Name**: Keepin' it REAL **Focus/aim**: Skills building in drug resistance and social competence **Programme type**: Drug resistance skills **Theoretical base**: narrative theories, social learning theories, communication competence theories **Key components**: Schools were assigned to one of three versions of the intervention: 1) Mexican American (n=8); 2) Black/White (n=9); or 3) Multicultural (n=8). Resistance and avoidance skills delivered through classroom videotapes and televised public service announcements. **Providers/delivers**: Teachers, media **Length**: 10 lessons in grade 7, booster sessions in grade 8 **Duration**: 2 years **Intensity**: NR **Other details**: Teachers attended a 1-day training session, and half-day follow-up session **Comparator**: Existing substance use prevention programs chosen and instituted by schools. Consisted of other research-based programs **Population details** **Inclusion**: Students in seventh grade during programme delivery **Exclusion**: NR **Total** n= 35 schools (n= 6,035 students) **Intervention**, n= 25 schools **Comparator**, n= 10 schools	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Generalised estimating equations **Unit of allocation:** Organisation/ institution (35 schools) **Unit of analysis:** School **Time to follow-up**: 2 (wave 2), 8 (wave 3) and 14 months (wave 4) **Other details:** None **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Ethnic composition of groups differed. **Attrition** **Number of participants completing study**: 93% at Wave 2, 88% at Wave 3 and 84% at Wave 4. **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** Mean differences and standard errors for psychosocial variables (wave 2, wave 3, wave 4) Self-efficacy Mexican American versus control; 214*, .103, .067; Black/White versus control; -.016, -.005, .083; Multicultural versus control; .039, .110, .122 Intentions to accept substances Mexican American versus control; -.080*, -.043, -.037; Black/White versus control; .012, .021, -.054; Multicultural versus control; -.029, -.070, -.051 Positive Expectancies of substance effects Mexican American versus control; -.039, -.030, -.034; Black/White versus control; -.020, -.026, -.126; Multicultural versus control; -.088, -.148*, -.135 Personal anti-drug attitudes Mexican American versus control; .132**, .125*, .100; Black/White versus control; .047, .011, 0.49; Multicultural versus control; .096**, .133*, 0.62 Parents' injunctive; Mexican American versus control; 214*, .103, .067; Black/White versus control; -.016, -.005, .083; Multicultural versus control; .039, .110, .122 Intentions to accept Mexican American versus control; -.080*, -.043, -.037; Black/White versus control; .012, .021, -.054; Multicultural versus control; -.029, -.070, -.051 Positive Expectancies Mexican American versus control; -.039, -.030, -.034; Black/White versus control; -.020, -.026, -.126; Multicultural versus control; -.088, -.148*, -.135 Personal anti-drug Mexican American versus control; .132**, .125*, .100; Black/White versus control; .047, .011, .049; Multicultural versus control; .096**, .133*, .062 Parents' injunctive Mexican American versus control; .086, .008, .048; Black/White versus control; -.013, .063, .013; Multicultural versus control; .038, .077, .016 Friends' injunctive

	Male: ~50% **Mean age (range)**: 12.5 years at Wave 1 **Ethnicity**: Mexican/Mexican-American 55%; Latino/ multiethnic Latino 18.9%; non-Hispanic White 17.4%; African-American 8.7% **Baseline drinking behaviours**: NR		Mexican American versus control; .097*, .070, .089; Black/White versus control; -.046, .004, .052; Multicultural versus control; .058, .170***, .089 Descriptive Mexican American versus control; -.221***, -.229**, -.140*; Black/White versus control; -.039, -.053, -.053; Multicultural versus control; -.088, .-.087, -.038 **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Intervention versus control: Use of alcohol increased over time in both the intervention and control groups. The increase was significantly less for intervention students. Mean difference (SE) between intervention and control (At 3 months; 8 months; 14 months) Recent substance use: -0.060 (0.032); -0.099** (0.035); -0.159*** (0.044) Alcohol: -0.148** (0.045); -0.144* (0.061); -0.232*** (0.064) Cigarettes: -0.039 (0.035); -0.091* (0.042); -0.070 (0.057) Cannabis: 0.007 (0.039); -0.062 (0.040); -0.175*** (0.048) *p<0.05; **p<0.01; *** p<0.001 Mexican American, Black/White, and Multicultural versions versus Control: Students in each condition reported increased alcohol use over the course of the study, however increases were smaller in the intervention conditions compared to control with regards to alcohol use at 3- and 14-months [mean difference at Wave 4 Mex Am = –0.168 (SE 0.064, p<0.05); Bl/Wh = -0.149 (SE 0.063, p<0.05); Mult = -0.159 (SE 0.052, p<0.05)].

Study details	Intervention and population details	Analyses	Results
Kulis et al (2005) RCT (cluster) - **Objective:** To assess the efficacy of a three curriculum versions of a drug program, modelled on Mexican American culture, another modelled on European American and African American culture and a multicultural version. **Setting:** School, **Country:** USA **Funding source:** NR	**Intervention details** **Name**: Keepin' it real **Focus/aim**: Drug resistance **Programme type**: Resistance skills **Theoretical base**: Resistance skills and social norms **Key components**: Three versions of the intervention: (1) Latino; (2) non-Latino; and (3) multicultural. All programmes included direct instruction, in-class participatory exercises, videotapes and homework. Follow-up year of booster activities conducted approximately once a month in intervention schools (Grade 8). **Providers/delivers**: Teachers, **Length**: 10 lessons **Duration**: **Intensity**: **Other details**: Supplemented by public service announcements (TV and radio) and a billboard campaign. Teachers received a full day of training and two half-day follow-up sessions. **Comparator**: Existing substance use prevention programmes **Population details** **Inclusion**: Participants who reported their race or ethnicity as Mexican American, Mexican or Chicano. **Exclusion**: **Total** n= 3,402 students **Intervention**, n= 2,397 **Comparator**, n= 1,005 **Male**: 51.5% **Mean age (range)**: 12.5 years (SD 0.6 years) **Ethnicity**: see Inclusion **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Regression models **Unit of allocation:** Organisation/ institution (35 schools) **Unit of analysis:** Group **Time to follow-up**: 14 months after intervention **Other details:** None **Baseline comparability** **Groups balanced at baseline**: Not clear **Comments**: Full baseline demographics not reported **Attrition** **Number of participants completing study**: Not clearly reported **Reasons for non-completion**: Two schools dropped out in second year of the study, transfers from schools, demographic information incomplete.	**Knowledge and understanding** NR **Attitudes and values** There was no difference between intervention and control students on any of the secondary measures (refusal confidence, intent to accept, positive expectancies, and norms). **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Mean difference (SE) between intervention and control conditions Recent alcohol use All intervention vs. control: -0.22 (0.09)* Latino vs. control: -0.24 (0.12) Non-Latino vs. control: -0.17 (0.14) Multicultural vs. control: -0.24 (0.09)* *p<0.01 Alcohol use increased between prestest and the 14-month follow up for students in all conditions. However, intervention students reported significantly smaller increases in recent use of alcohol compared to control students (p<0.01). Mexican and Mexican American students who received the multicultural version of the intervention reported significantly smaller increases in alcohol use compared to control (p<0.01). There was no difference between control students and those who received the Latino and non-Latino versions of the intervention.

Study details	Intervention and population details	Analyses	Results
Kulis et al (2007) RCT (Cluster) + **Objective:** examined the effectiveness of a universal youth substance use prevention program, the SAMHSA Model Program keepin' it REAL, in promoting reduced or recently discontinued alcohol, cigarette, and marijuana use **Setting:** School **Country:** USA **Funding source:** National Institutes of Health/National Institute on Drug Abuse	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1,364 students **Intervention**, n= 77% **Comparator**, n= 23% **Male** n (%) = 57% **Mean age (range)**: 12-16yrs **Ethnicity**: Latino heritage-77%; White/anglo-13%; remaining 10%-African American/Black, American Indian, Asian, Pacific islander. **Other baseline:** grade level, income level of family, **Intervention details** **Name**: Keepin' it REAL **Focus/aim**: protection against drug use, culturally appropriate, **Programme type**: drug prevention programme **Theoretical base**: resistance and life skills models, Botvin et al 2001. **Key components**: drug refusal skills **Providers/delivers**: **Length, duration**, i**ntensity**: curriculum **Other details**: **Comparator**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: binary logistic regression **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: pre-test, 2, 8 and 14 months post-test **Other details:** **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: **Attrition** **Number of participants completing study**: 604 **Reasons for non-completion**: student absence	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Reduced or recently discontinued use of alcohol; reduced use – programme (n=795; 43%) vs. control (n=233, 30%), p <0 .001. Discontinued use – programme (n=795, 34%) vs. control (n=233, 24%), p<0.01. Estimates (SE) and odds ratios for transitions to reduced use of alcohol: 0.54 (0.26), 1.72, p<0.05.

Study details	Intervention and population details	Analyses	Results
Lennox & Cecchini (2008) NRCT + **Objective:** To test the ability of the Narconon curriculum to change drug use behaviour, perceptions of risk/benefits, and general knowledge **Setting:** School **Country:** USA **Funding source:** Association for Better Living and Education, Narconon International, Narconon of Hawaii, Narconon of Oklahoma	**Population details** **Inclusion**: Students attending 14 schools **Exclusion**: NR **Total** n= 995 students **Intervention**, n= 464 **Comparator**, n= 531 **Male** n (%) intervention =171; control =319 **Mean age (range)**: 12-20 years **Ethnicity**: Black/African-American-25; Asian-290; American Indian-90; Native Hawaii-173; Other Pacific islander-73; White-435; Hispanic/Latino-53; Alaska native - 8; Other - 44 **Other baseline:** NR **Intervention details** **Name**: Narconon curriculum **Focus/aim**: Substances including alcohol **Programme type**: Drug education **Theoretical base**: Narconon **Key components**: Knowledge, social influence skills, interactive activities, competency enhancement, family/community components **Providers/delivers**: Other **Length, duration**, i**ntensity**: Eights modules **Other details**: **Comparator**: Delayed control	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: ANCOVA **Unit of allocation:** School **Unit of analysis:** Classroom **Time to follow-up**: 6 months **Other details:** Treatment effect nested within classroom effect **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: No **Attrition** **Number of participants completing study**: n=726 **Reasons for non-completion**: students not available on data collection day or no longer enrolled at school.	**Knowledge and understanding** After controlling for differences at baseline, significantly more intervention students than control students were able to give answers consistent with the program content (significance NR). **Attitudes and values** After controlling for baseline differences, the control group reported a greater tendency to plan to get drunk in the next year compared with the intervention group (p=0.003). Significantly more intervention students thought that people risk harming themselves by having one or two drinks nearly every day (p=0.010). No difference for “have five or more drinks once or twice each weekend”. Intervention group students were more likely than the control group to feel that regularly drinking beer, wine or hard liquor was wrong for someone of their age (p<0.001). Students in the intervention group were more likely to indicate that they knew enough about drugs to make decisions (p=0.002) and that they could resist pressures to take drugs (p=0.002). **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Differences between intervention and control group in terms of alcohol use and drunkenness did not reach statistical significance (p=0.040 p=0.073, respectively).

Study details	Intervention and population details	Analyses	Results
Lynam et al (1999) RCT (cluster) - **Objective:** To examine the impact of Project DARE, 10 years after administration. (see #28 for quality assessment of original study) **Setting:** School, **Country:** USA **Funding source:** NIDA, National Institutes of Health	**Intervention details** **Name**: Project DARE **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1,002 (at follow-up) **Intervention**, n= 762 **Comparator**, n= 240 **Male** n (%) = 43% **Mean age (range)**: 20.1 (0.78) (at follow-up) **Ethnicity**: 75.1% White, 20.4% African American, 0.4% 'other' **Baseline drinking behaviours**:	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: **Unit of allocation:** Organisation/ institution (23 schools) **Unit of analysis:** **Time to follow-up**: 10 years **Other details:** **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: No details reported **Attrition** **Number of participants completing study**: n=1,002 (1,429 students from original sample[#28] targeted) **Reasons for non-completion**:	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** DARE status in the 6th grade was unrelated to peer-pressure resistance levels at age 20 and negatively related to self-esteem at age 20 (the authors report that this was likely to be a chance finding). **Health and social outcomes related to alcohol and sexual health** DARE status was unrelated to alcohol use or either kind of alcohol expectancy (negative and positive) at age 20.

Study details	Intervention and population details	Analyses	Results
Perry et al (2003) RCT (cluster) + **Objective:** To evaluate DARE and DARE plus **Setting:** School and family **Country:** USA (Minnesota) **Funding source:** National Institute on Drug Abuse	**Intervention details** **Name**: (1) D.A.R.E.; (2) D.A.R.E. Plus **Focus/aim**: Tobacco, alcohol and cannabis use; violent behaviour **Programme type**: Resistance skills, citizenship skills, **Theoretical base**: social influence **Key components:** (1) D.A.R.E.: 10-session DARE curriculum; (2) D.A.R.E. Plus: 10-session DARE curriculum plus (a) classroom-based, peer-led, parental involvement programme ('On the VERGE'). Included 4-session program implemented by trained teachers once a week for 4 weeks, homework activities, a class theatre production, 3 postcards sent to families (10 additional postcards mailed to parents every 6 to 8 weeks); (b) extracurricular activities during 2 school years; (c) neighbourhood action teams **Providers/delivers**: (1) Police officers; (2) Teachers, peers, police officers **Length**: See above **Duration**: See above **Intensity**: See above **Other details**: None **Comparator**: "Delayed program" control. **Population details** **Inclusion**: School districts with middle, junior and high schools with a 7th grade population of at least 200. **Exclusion**: **Total** n= 6,237 **Intervention**, n= 2226 (36%) D.A.R.E. only, n=2221 (36%) D.A.R.E. + **Comparator**, n= 1,790 (29%) **Male**: 51% **Mean age (range)**: 7th grade **Ethnicity**: 67.3% white	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Random coefficients models **Unit of allocation:** Organisation/ institution (24 schools) **Unit of analysis:** Organisation/ institution **Time to follow-up**: 6 months, 18 months **Other details:** The alcohol use items measured occasions of use in the past year and in the past month (7 response categories each) and occasions of having gotten drunk (6 response categories). In addition, scales were formed that measured behaviour and intentions related to the use of alcohol (9 items; scale range, 9-49; _=.88); and multiple drugs (21 items; scale range, 21-102; _=.93). **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: Matched on socio-economic measures before allocation. **Attrition** **Number of participants completing study**: 84% **Reasons for non-completion**:	**Knowledge and understanding** NR **Attitudes and values** Boys receiving the D.A.R.E. Plus programme were less likely than those in the control group to show increases in alcohol intentions (p=0.04). There were no differences between conditions among girls. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** No significant difference in use of alcohol between D.A.R.E. Plus students and control students at follow-up. Boys receiving the D.A.R.E. Plus programme were less likely than those in the control group to show increases in past year or month alcohol use (p=0.04 and p=0.01, respectively). Girls in D.A.R.E. Plus schools were less likely to report increases in ever having been drunk, compared with girls in D.A.R.E. only schools (p=0.04). There were no other differences between conditions among girls. Change in alcohol use from baseline to final follow-up: mean (SE). (Control n=1093; D.A.R.E. only n=1269; D.A.R.E. Plus n=1381) *Boys* Past year use: 0.26 (0.03); 0.21 (0.03); 0.19 (0.03) Past month use: 0.14 (0.02); 0.11 (0.02); 0.08 (0.02) Ever drunk: 0.15 (0.02); 0.11 (0.02); 0.11 (0.02) *Girls*

	Baseline drinking behaviours: Alcohol use at baseline – mean (SE) (Control n=1093; D.A.R.E. only n=1269; D.A.R.E. Plus n=1381) Boys: Past year use: 1.31 (0.04); 1.31 (0.03); 1.29 (0.03); Past month use: 1.11 (0.02); 1.10 (0.02); 1.09 (0.43); Ever drunk: 1.09 (0.02); 1.10 (0.02); 1.07 (0.02); Girls; Past year use: 1.23 (0.03); 1.27 (0.03); 1.25 (0.03); Past month use: 1.08 (0.02); 1.08 (0.02); 1.08 (0.02);Ever drunk: 1.07 (0.02); 1.07 (0.02); 1.07 (0.02)	Relocating, absenteeism, parental refusal, student refusal, home schooling, limited English, special education	Past year use: 0.25 (0.04); 0.27 (0.04); 0.23 (0.04) Past month use: 0.12 (0.03); 0.13 (0.02); 0.08 (0.03) Ever drunk: 0.12 (0.02); 0.13 (0.02); 0.07 (0.02) Boys receiving the D.A.R.E. Plus programme were less likely than those in the control group to show increases in alcohol behaviour and intentions (p=0.04). There were no differences between conditions among girls.

Study details	Intervention and population details	Analyses	Results
Ringwalt et al (1991) RCT (cluster) - **Objective:** To evaluate the impact of DARE. **Setting:** School **Country:** USA (North Carolina) **Funding source:** Alcohol and Drug Defence Program, North Carolina Department of Education	**Intervention details** **Name**: D.A.R.E. **Focus/aim**: Alcohol and other drugs **Programme type**: Resistance skills, self-esteem building **Theoretical base**: social influence **Key components**: Core D.A.R.E. curriculum **Providers/delivers**: Police officer **Length**: 17 sessions **Duration**: 45-60 mins **Intensity**: Once a week **Other details**: Officers were carefully screened and received 2 weeks of intensive training. Five officers used. **Comparator**: Delayed intervention **Population details** **Inclusion**: **Exclusion**: **Total** n= pretest data from 1402, post-test from 1270 **Intervention**, n= 685 (53.9%) **Comparator**, n= 585 (46.1%) **Male**: 48% **Mean age (range)**: 10.4 (SD 0.81) **Ethnicity**: Post test: 50% black, 40% white, 10% American Indian, Asian or Hispanic **Baseline drinking behaviours**: 37% lifetime prevalence of beer. 20% lifetime prevalence of wine or wine coolers.	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Multiple outcome measures, MANOVA **Unit of allocation:** Organisation/ institution (School) **Unit of analysis:** Organisation/ institution **Time to follow-up**: Immediate posttest **Other details:** Alcohol use was assessed by two scales derived from two sets of questions about students' use of beer, wine coolers and wine (infrequent reporting of 'hard liquor' use so not reported). These asked students how many times they had used these substances in their 'whole life' and in the 'last 2 weeks'. Response options were 'never', 'once or twice' and 'three or more times'. Lifetime alcohol involvement measure was created by totalling the six responses concerning both lifetime use and last 2 weeks' use of the three types of alcohol. The second measure, current alcohol use, summed students' responses to the three questions on their use of the beer, wine coolers and wine in the last 2 weeks. **Baseline comparability** **Groups balanced at baseline:** No or not reported **Comments**: DARE students reported greater lifetime involvement with alcohol. All variables controlled for in subsequent analyses. **Attrition** **Number of participants completing study**: n=1,270 (90.6%) **Reasons for non-completion**: Mainly absenteeism, but some parents refused permission (3.2%)	**Knowledge and understanding** NR **Attitudes and values** Compared with control students, students in DARE perceived alcohol costs to be higher, and the media portrayal of beer drinking to be more favorable. Significant overall effects of DARE were shown for: general attitude toward drugs, attitude toward use of specific drugs, perceived peer attitude toward drug use and assertiveness. There was no effect of DARE on self-esteem. Relative to students in the control schools, students who received Project DARE had more negative attitudes both toward drugs in general and the use of specific substances; and were less likely to believe that their peers had a positive attitude and were more assertive. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** The analyses showed that DARE had significant overall effects on alcohol-related variables. However there was no difference between DARE students and control students on measures of current use or lifetime involvement with alcohol. Lifetime involvement with alcohol (DARE; control) Pre-test: 50.2%; 40% Post-test: 54.8%, 49.8%

Study details	Intervention and population details	Analyses	Results
Rosenbaum and Hanson (1998) NRCT + **Objective:** To estimate the short and long term effects of DARE on students' attitudes, beliefs, social skills and drug use behaviours. **Setting:** School, **Country:** USA **Funding source:** Illinois State Police	**Intervention details** **Name**: DARE **Focus/aim**: Alcohol, drug and violence **Programme type**: Resistance skills **Theoretical base**: social skills and social influence **Key components**: core DARE curriculum **Providers/delivers**: Police officers **Length**: 17 weeks **Duration**: 1 hr **Intensity**: weekly **Other details**: None **Comparator**: NR **Population details** **Inclusion**: Students who participated in the pre-test survey in 1989 (5^{th}/6^{th} grade). **Exclusion**: NR **Total** n= 1,798 **Intervention**, n= 54.2% **Comparator**, n= 45.8% **Male**: 51% **Mean age (range)**: 10-11 years (65.6% in 6^{th} grade at pre-test) **Ethnicity**: 51.1 % white; 29.8% African American; 10.8% Hispanic; 8.4% other **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Random effects ordinal regression model **Unit of allocation:** Organisation/ institution (School) **Unit of analysis:** Individual **Time to follow-up**: 6 years from baseline **Other details:** None **Baseline comparability** **Groups balanced at baseline:** No or not reported **Comments**: No data reported **Attrition** **Number of participants completing study**: Proportion of DARE students decreased by 2% **Reasons for non-completion**:	**Knowledge and understanding** Students who participated in DARE were more likely than control students to report awareness of media efforts to make beer appear attractive. However there was a significant interaction with time suggesting dissipation of the effects over time. **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** After controlling for age and exposure to supplementary drug education the authors found no significant effects of DARE on lifetime or last month alcohol use. Adjusted means at the immediate posttest were 1.07 and 0.33 respectively. DARE participation had a small but non-significant effect on delaying the onset of first getting drunk (0.11, NS) but decreased the delay in regular drinking (-0.05, NS).

Study details	Intervention and population details	Analyses	Results
Rosenbaum et al (1994) NRCT + **Objective:** To estimate the effects of DARE on the attitudes, beliefs and drug use behaviours of students in the year following exposure to the programme. **Setting:** School **Country:** USA **Funding source:** NIDA, Illinois State Police	**Intervention details** **Name**: DARE **Focus/aim**: Reduce substance use, foster negative attitudes towards substance use **Programme type**: Resistance skills **Theoretical base**: NR **Key components**: DARE curriculum **Providers/delivers**: External, Police **Length**: 17 weeks **Duration**: 1 hr **Intensity**: Once a week **Other details**: **Comparator**: Details not reported (offered financial incentive to participate) **Population details** **Inclusion**: Students in their final year of elementary school. Students surveyed at the pre-test and follow-up. **Exclusion**: NR **Total** n= 36 schools (1,800 pupils) **Intervention**, n= 18 (50%) **Comparator**, n= 18 (50%) **Male**: 50.3% **Mean age (range)**: 10-11 **Ethnicity**: 49.9% White; 24.7% African American **Baseline drinking behaviours**: 55.1% reported lifetime use of alcohol.	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Multiple logistic regression **Unit of allocation:** Organisation/ institution (36 schools) **Unit of analysis:** Organisation/ institution **Time to follow-up**: 1 year after baseline assessment **Other details:** Students indicated whether they had used alcohol “in their whole life” and “during the last month (30 days)”. The analysis sample consisted of students surveyed at both the pre-test and 1 year from baseline. **Baseline comparability** **Groups balanced at baseline:** No or not reported **Comments**: No details reported **Attrition** **Number of participants completing study**: n= 1,584 pupils (88%) **Reasons for non-completion**: moving out of area, absent, refusal	**Knowledge and understanding** NR **Attitudes and values** Students exposed to DARE were significantly more likely than students in the control group to recognise the media’s portrayal of beer drinking as desirable ($p < 0.05$). **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** The results of the logistic regression model showed that DARE exposure had no statistically significant main effects on the initiation of alcohol use, increased use of alcohol, or quitting behaviour. Odds ratios for effect of DARE on alcohol use Increase OR = 1.23 Quitting OR = 1.13 Initiation OR = 0.93

Study details	Intervention and population details	Analyses	Results
Shope et al (1996b) CBA - **Objective:** To develop, implement and evaluate a grade 5-8 substance abuse prevention programme. **Setting:** School **Country:** USA **Funding source:** Michigan Department of Public Health, Michigan Department of Education, Michigan Office of Substance Abuse Services, NIAAA	**Intervention details** **Name**: Based on AMPS curriculum **Focus/aim**: Alcohol, tobacco and drugs **Programme type**: social pressures and resistance training approach **Theoretical base**: NR **Key components**: worksheets, role playing, **Providers/delivers**: Teachers, **Length**: 7 lessons (5/6); 8 lessons (7/8) **Duration**: 45-50 mins **Intensity**: NR **Other details**: Teachers attended one-day training session **Comparator**: No prevention curriculum **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1911, (n=442 in analysis sample) **Intervention**, n= 308 **Comparator**, n= 134 **Male** n (%) = 48.7%; 54.5% **Mean age (range)**: NR **Ethnicity**: NR **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Repeated measures ANOVA **Unit of allocation:** Schools **Unit of analysis:** Individual **Time to follow-up**: PT1 at 2 months; PT2 after 2nd year (1 yr from PT) **Other details:** Data from a subset of 3112 students used in analysis (pre-test, PT1 and PT2), subset comprised of 1,911 students who either received the substance abuse prevention programme for 2 consecutive years, or received no prevention curriculum during either year. Analyses in fact focused on 442 students in 6/7th grade. **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: **Attrition** **Number of participants completing study**: n=442 **Reasons for non-completion**: n=703 from subset lost to follow-up (reported more alcohol use)	**Knowledge and understanding** Means (SD) for knowledge of effects, knowledge of pressures, knowledge of skills (programme, comparison) Knowledge of Effects Grade 6 pre (n=308, n=134): 40.8 (20.5); 42.8 (20.8) Grade 6 PT (n=308, n=134): 47.2 (23.5); 44.3 (21.5) Grade 7 PT (n=308, n=134): 57.4 (25.2); 52.0 (22.9) Knowledge of Pressures Grade 6 pre (n=308, n=134): 48.6 (30.9); 49.3 (28.6) Grade 6 PT (n=308, n=134): 57.0 (32.2); 49.9 (32.7) Grade 7 PT (n=308, n=134): 60.5 (31.4); 55.2 (28.6) Knowledge of Skills Grade 6 pre (n=308, n=134): 44.2 (32.9); 44.0 (34.1) Grade 6 PT (n=308, n=134): 44.3 (37.1); 45.3 (35.7) Grade 7 PT (n=308, n=134): 53.2 (37.2); 50.5 (37.6) Students in both the programme and comparison group increased their total knowledge over time, however programme students' total knowledge and knowledge of the effects of substance use increased significantly more "rapidly" than comparison students (both p<0.05). Programme students also had significantly higher scores on these measures at the Grade 7 PT compared to control students. No difference on knowledge of pressures to use substances or knowledge of skills. **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Means (SD) for alcohol use and misuse (programme, comparison) Alcohol use Grade 6 pre (n=295; n=130): 0.44 (0.82); 0.42 (0.76)

			Grade 6 PT (n=295; n=130): 0.60 (1.27); 0.56 (1.23) Grade 7 PT (n=300; n=133): 0.71 (1.25); 1.33 (1.88) Alcohol misuse Grade 6 pre (n=300; n=132): 0.31 (0.88); 0.41 (1.07) Grade 6 PT (n=304; n=133): 0.43 (1.29); 0.45 (1.05) Grade 7 PT (n=303; n=134): 0.66 (1.57); 0.99 (1.71) The authors report that a significant programme effect on alcohol use ($p<0.0001$) was found. Programme students' mean values rose from 0.44 to 0.69 compared to comparison students' mean values that rose from 0.41 to 1.26. However, means of the groups were only significantly different at the Grade 7 PT. There was no difference between the two groups on the measure of alcohol misuse over time ($p=0.09$). However, the authors report that there was a difference between group means at Grade 7 PT.

Study details	Intervention and population details	Analyses	Results
Shope et al (1998) CBA - **Objective:** To assess the long-term effects of substance abuse prevention delivered in the 6th and 7th grades. (Follow-up study in 12th grade of Shope et al 1996b) **Setting:** School **Country:** USA **Funding source:** National Institute on Alcohol Abuse and Alcoholism	**Intervention details** **Name**: Based on Alcohol Misuse Prevention Study (AMPS) curriculum **Focus/aim**: Alcohol, tobacco and drugs **Programme type**: Social pressures resistance training **Theoretical base**: social influence theory **Key components**: Alcohol use and misuse. Knowledge of drugs (Gateway) **Providers/delivers**: Teachers, **Length**: 2 year long curriculum **Duration**: NR **Intensity**: NR **Other details**: **Comparator**: NR **Population details** **Inclusion**: Students completing all 4 questionnaires (in grades 6-8 and grade 12) **Exclusion**: **Total** n= 262 **Intervention**, n= 187 **Comparator**, n= 75 **Male**: 48% **Mean age (range)**: 6th grade mean 12 (0.5) years **Ethnicity**: 94% White, 3% black and 3% Other (4 cases not reporting) **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: repeated measures ANOVA **Unit of allocation:** Group (school) **Unit of analysis:** Individuals **Time to follow-up**: Up to 6 years **Other details:** **Baseline comparability** **Groups balanced at baseline:** No **Comments**: **Attrition** **Number of participants completing study**: 442 students completed all surveys and had both years of the intervention or none **Reasons for non-completion**:	**Knowledge and understanding** Means, standard deviations and results of knowledge measures by treatment group, gender and occasion. [Boys (Mean, SD); Girls (Mean, SD)] Intervention Gr 6 Pretest 46.38,20.19; 43.12, 19.40; Gr 6 Posttest 48.24, 24.87; 50.99, 20.10; Gr 7 Posttest 56.34, 23.58; 59.93, 21.32; Gr 12 Posttest 65.88, 16.27; 67.45, 15.27 Comparison Gr 6 Pretest 45.05, 20.07; 43.65, 16.21; Gr 6 Posttest 42.02, 20.98; 49.05, 16.65; Gr 7 Posttest 52.93, 21.73; 53.17; 20.74; Gr 12 Posttest 54.75, 22.90; 66.51, 18.54 The authors report that there were no significant effects of the curriculum on knowledge at the 12th grade follow-up. **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Means, standard deviations and results of alcohol use by treatment group, gender and occasion. [Boys (Mean, SD); Girls (Mean, SD)] Intervention Gr 6 Pre-test 0.41, 0.85; 0.29, 0.55; Gr 6 Posttest 0.40, 0.97; 0.40, 1.00; Gr 7 Posttest 0.61, 1.19; 0.50, 1.03; Gr 12 Posttest 2.76, 2.48; 2.15, 2.18 Comparison Gr 6 Pre-test 0.76, 0.95; 0.21, 0.47; Gr 6 Posttest 0.72, 0.28; 0.33, 1.03; Gr 7 Posttest 1.55, 2.16; 0.74, 1.23; Gr 12 Posttest 2.48, 2.47; 2.36, 2.36 Means, standard deviations and results of alcohol misuse by treatment group, gender and occasion. [Boys (Mean, SD); Girls (Mean, SD)] Intervention Gr 6 Pre-test 0.31, 1.15; 0.21, 0.55; Gr 6 Posttest 0.46, 1.52; 0.23, 0.74; Gr 7 Posttest 1.58,

			1.67; 0.33, 1.02; Gr 12 Posttest 1.69, 1.98; 1.41, 1.89 Comparison Gr 6 Pre-test 0.06, 0.25; 0.05, 0.32; Gr 6 Posttest 0.13, 0.43; 0.10, 0.64; Gr 7 Posttest 0.61, 1.54; 0.33, 0.96; Gr 12 Posttest 0.87, 1.69; 1.23 1.93 A significant treatment effect was found for alcohol use (p=0.03), but this was attributable to the curriculum group scoring significantly lower than the comparison group at the grade 7 posttest. There was no difference between groups at the 12th grade follow-up, with both groups reporting drinking an average of about 2-3 drinks per week. Alcohol use at 12th grade follow-up - mean (SD) (boys; girls) Curriculum: 2.76 (2.48); 2.15 (2.18) Comparison: 2.48 (2.47); 2.36 (2.36) A significant effect of the curriculum on alcohol misuse at 7th grade posttest had also disappeared by the 12th grade follow-up. Both groups reported experiencing an average of 1-2 alcohol misuse experiences in the previous two months. Alcohol misuse at 12th grade follow-up - mean (SD) (boys; girls) Curriculum: 1.69 (1.98); 1.41 (1.89) Comparison: 1.45 (1.71); 1.22 (1.70)

Study details	Intervention and population details	Analyses	Results
Shortt et al (2007) RCT (Cluster) ++ **Objective:** Evaluation of Resilient Families **Setting:** School, family **Country:** Australia **Funding source:** NHMRC, AERF, philanthropic trust	**Population details** **Inclusion**: Students in 24 schools who agreed to participate in the study **Exclusion**: NR **Total** n= 2,315 students **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = 43 **Mean age (range)**: mean 12.3 yrs **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: Resilient Families **Focus/aim**: Enhance parenting skills and family relationships **Programme type**: Family + school based alcohol prevention **Theoretical base**: NR **Key components**: Relationship problem solving, communication, emotional awareness, peer resistance skills, conflict resolution, quiz for parents, **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: One year curriculum ; 2 hour quiz; eight, 2 hour sessions or parents /carers **Other details**: None **Comparator**: Regular practice	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Logistic regression models **Unit of allocation:** School **Unit of analysis:** Individual* **Time to follow-up**: 14 months ***Other details:** Analyses controlled for clustering **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: None **Attrition** **Number of participants completing study**: n=2128 (91.9%) **Reasons for non-completion**: leaving school, absenteeism, refusal, invalid survey	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** Being in an intervention school predicted: High family attachment ($p < 0.05$) OR = 1.42 95% CI 1.04-1.94 Higher self reported anxiety ($p < 0.05$) OR = 1.27 95% CI 1.00-1.61 High School rewards ($p < 0.05$) OR = 1.38 95% CI 1.01-1.61 Lower absenteeism ($p < 0.05$) OR = 0.64 95% CI 0.41 - 0.99 **Health and social outcomes related to alcohol and sexual health** Being in an intervention school did not predict alcohol use status in any of the statistical models (OR = 1.12, 95% CI 0.84, 1.49)

Study details	Intervention and population details	Analyses	Results
Simons-Morton (2005) RCT (cluster) + **Objective:** To evaluate the effects of a school based intervention on substance use **Setting:** School **Country:** USA **Funding source:** NR	**Intervention details** **Name**: Going Places programme **Focus/aim**: To reduce substance use **Programme type**: problem solving, self-control, communication, and conflict resolution skills. **Theoretical base**: social skills training, school environment change, social development and social cognitive theories **Key components**: social skills curriculum, parent education and school environment enhancement **Providers/delivers**: Teachers **Length**: 18 sessions in 6th grade, 12 sessions in 7th grade and 6 sessions in 8th grade **Duration**: 3 years **Intensity**: NR **Other details**: Parents received a 20-min instructional video on authoritative parenting and a 20-page booklet entitled "Attentive Parenting: The Going Places Guide for Parents of Middle School Students" and periodic newsletters. Students were assigned homework that required the involvement of a parent or guardian. **Comparator**: Those not receiving an intervention **Population details** **Inclusion**: **Exclusion**: Students attending special education classes. **Total** n= 2651 at pre-test (final sample n=1484) (7 schools) **Intervention**, n= 692 (3 schools) **Comparator**, n= 628 (4 schools) **Male** n (%) = 570 **Mean age (range)**: **Ethnicity**: 939 white, 273 black, 108 other. **Baseline drinking behaviours**: See results	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANOVA, ANCOVA, Latent Growth Curve Modelling **Unit of allocation:** Organisation/ institution (7 middle schools) **Unit of analysis:** Individual **Time to follow-up**: Each year, from 6th to 9th grade (5 follow-up points). **Other details:** **Baseline comparability** **Groups balanced at baseline**: NR **Comments**: Details not reported **Attrition** **Number of participants completing study**: n= 1320 (49.8%) **Reasons for non-completion**: Failed to complete surveys. Study participants lost to follow up were significantly more likely to be black, live in a single parent family, and to have reported smoking, drinking, and antisocial behavior.	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Negligible treatment group differences were found for drinking behavior. Drinking stage - mean (SD) (T1; T2; T3; T4; T5) Treatment (*n* = 692): 0.36 (0.86); 0.70 (1.12); 0.99 (1.17); 1.36 (1.38); 1.47 (1.40) Control (*n* = 620): 0.35 (0.84); 0.73 (1.09); 1.14 (1.31); 1.32 (1.36); 1.51 (1.45)

Study details	Intervention and population details	Analyses	Results
Slater et al (2006) RCT (cluster) + **Objective:** To assess the effects of a curriculum intervention programme on middle-grade schools with and without community and media support **Setting:** School + community, **Country:** USA **Funding source:** National Institute of Drug Abuse	**Intervention details** **Name**: Be under your own influence (Media)/All Stars **Focus/aim**: Decrease alcohol consumption, warn of the dangers of abuse and emphasise that (alcohol) abuse damages personal autonomy **Programme type**: Normative education **Theoretical base**: NR **Key components**: Three intervention conditions: (1) In-school media and All Stars; (2) In-school media only; or (3) All Stars only. Media: Printed media material in school and community based participative campaign with workshops, mainly in the hands of community prevention leaders. Curriculum based emphasis of non-use norms, commitment and school bonding **Providers/delivers**: Teachers, Community leaders **Length**: Curriculum: 13 sessions in the first year and 7 booster sessions in the second year **Duration**: 2 years **Intensity**: **Other details**: Because of admin burden, the trial took place over 4 years (1999-2003) in a staggered fashion. **Comparator**: No intervention **Population details** **Inclusion**: **Exclusion**: **Total** n= 4216 **Intervention**, n= **Comparator**, n= **Male** n (%) = 48% **Mean age (range)**: 12.2 years **Ethnicity**: 83.3% whites, 10.4% African-American, 2.9% Hispanic, 3.4% other. **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: NR **Statistical method(s) used to analyse data**: 4 level random intercept with multiple imputation for missing data. **Unit of allocation:** Community (16 communities) **Unit of analysis:** Community **Time to follow-up**: 2 years **Other details:** Lifetime incidence of alcohol intoxication score based on 3 questions assessed in 4 "waves" over 2 years. **Baseline comparability** **Groups balanced at baseline**: Not clear **Comments**: The authors claim to have balanced school and grade but no evidence is reported. **Attrition** **Number of participants completing study**: 68.6% **Reasons for non-completion**: Missing data were primarily the result of absence from school on the day of the survey or missed survey items.	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Results using the community as the unit of analysis demonstrated a significant effect of the in-school media intervention on alcohol use (OR 0.40, p=0.009). Effects of the All Stars curriculum were statistically significant for alcohol use also (OR 0.68 p<0.001). However, as schools were not randomly assigned to receive the curriculum, the authors advise caution in interpreting this result.

Study details	Intervention and population details	Analyses	Results
Smith et al (2004); **Vicary et al (2004)** RCT (cluster) + **Objective:** To report the findings of the first two years of a study to compare a standard LST programme with an infused approach. **Setting:** School **Country:** USA **Funding source:** National Institute on Drug Abuse	**Intervention details** **Name**: LST, infused-LST **Focus/aim**: Alcohol, smoking and cannabis **Programme type**: life skills training **Theoretical base**: NR **Key components**: LST - self-image and self-improvement, decision-making; smoking, cannabis, alcohol myths and realities; smoking and biofeedback; advertising awareness; coping with anxiety; communication skills; social skills; and assertiveness. **Providers/delivers**: Teachers **Length**: LST - 15 sessions; I-LST - not set number **Duration**: NR **Intensity**: NR **Other details**: LST - booster sessions in 8th grade (10 sessions) and 9th grade (5-7 sessions); Teachers trained by approved LST trainer. I-LST - LST core components taught to each student in at least one subject area (mapped onto curriculum content). Trained by members of research team in LST principles. **Comparator**: Did not receive any programming till 10th grade **Population details** **Inclusion**: Schools were eligible if they had low socioeconomic status and a relatively small size (n<1,000). **Exclusion**: NR **Total** n= 732 **Intervention**, n= LST 234; I-LST 297	**Process details** **Data collection method(s)**: Questionnaire/Survey (Self Report) **Statistical method(s) used to analyse data**: Fixed effects analysis of covariance regression model with maximum likelihood estimation procedures. **Unit of allocation:** Organisation/institution (9 middle schools) **Unit of analysis:** Individual **Time to follow-up**: posttest, 2 years **Other details:** Estimate of intra-class correlation found to be negligible. **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: Baseline differences in free lunch eligibility, substance use, and the incidence of problem behaviours. **Attrition** **Number of participants completing study**: 712 (97%) at T1, 704 (96%) at T2 and 659 (90%) at T3 **Reasons for non-completion**: Incomplete data, attrition and absence	**Knowledge and understanding** LST significantly affected knowledge of ATOD although these effects had disappeared by the end year 2. **Attitudes and values** LST significantly affected pro drug attitudes and normative beliefs although these effects had disappeared by the end year 2. I-LST showed significant treatment effects for attitudes towards ATOD at the end of year 2. **Personal and social skills** Both LST and I-LST low risk females showed treatment effects for decision making, communication and coping skills at the end of the first year, however these had disappeared by the end of year 2. LST females showed significantly worse media resistance skills at the end of year 2. Two treatment effects existed for low risk I-LST females, at the end of year 1 I-LST positively affected decision making but this effect was reduced to below significance by the end of year two. The I-LST program resulted in greater coping skills by the end of year two for the low risk females. For high risk females in the LST group treatment effects were found for assertiveness and refusal skills. Assertiveness effect remain but refuel effect disappeared by the end of year 2. I-LST showed significant treatment effects for refusal skills at the end of year 2. **Health and social outcomes related to alcohol and sexual health** (Only coefficients reported) By the end of the first year (T2 - end of 7th grade) the intervention showed no significant effects for males. For females in the LST condition a significant reduction in the frequency of alcohol use and binge drinking was observed. By year two (T3 - end of 8th grade) all effects had disappeared. For the I-LST group a significant reduction in the frequency of binge drinking was found or females only. By the end of the second year no alcohol-related remained significant when compared to controls. [Vicary et al 2004]: The LST low risk females reported significantly lower frequency of alcohol use and binge drinking. For females at higher risk at the end of the first

	Comparator, n= 201 **Male** n (%) = 54.4% **Mean age (range)**: NR **Ethnicity**: 96.6% White **Baseline drinking behaviours**: NR		year high risk females in the LST group were less likely to use alcohol. By the end of year 2 the effects had disappeared. In the high risk females group, I-LST showed a significant treatment effect for frequency of alcohol use and binge drinking at the end of the first year. I-LST also had a significant effect on frequency of drunkenness and binge drinking at the end of year 2.

Study details	Intervention and population details	Analyses	Results
Snow et al (1992) CBA - **Objective:** To undertake a two year evaluation of the Adolescent Decision Making Program **Setting:** School **Country:** USA **Funding source:** NIDA; NIMH	**Intervention details** **Name**: Evaluation of Adolescent Decision Making Program **Focus/aim**: NR **Programme type**: Social influences **Theoretical base**: NR **Key components**: Three components: (1) decision making; (2) group process skills; and (3) social network utilisation. **Providers/delivers**: NR **Length**: NR **Duration**: NR **Intensity**: NR **Other details**: None **Comparator**: Details not reported **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1,360 **Intervention**, n= 680 (50) **Comparator**, n= 680 (50) **Male** n (%) = 51.5% **Mean age (range)**: 6th grade **Ethnicity**: **Baseline drinking behaviours**:	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: MANOVA; logistic regression **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: 2 years **Other details:** **Baseline comparability** **Groups balanced at baseline:** No or not reported **Comments**: **Attrition** **Number of participants completing study**: n=1,075 (79%) **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Significant negative programme effect observed with logistic regression, high proportion of intervention students reported alcohol use ($p < 0.05$). No between group differences; mean and standard deviation (m 0.91(sd 0.59); m 0.85(sd 0.63), NS)

Study details	Intervention and population details	Analyses	Results
Snow et al (1997) CBA - **Objective:** Reanalysis on the basis of subjects' gender and household status. (Links to Snow et al 1992) **Setting:** School **Country:** USA **Funding source:** NIDA, NIMH	**Intervention details** **Name**: Adolescent Decision Making Programme **Focus/aim**: Analysis of ADM based on gender and family status **Programme type**: Skills training **Theoretical base**: NR **Key components**: As before **Providers/delivers**: Teachers, **Length**: 1. 12 weeks 2. 12 weeks **Duration**: 1. 40 mins 2. 45 mins **Intensity**: 1. weekly 2. weekly **Other details**: **Comparator**: NR **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1. 1360; 2. 918 **Intervention**, n= 1.680; 2. 463 **Comparator**, n= 1. 680; 2. 455 **Male** n (%) = 1.51.5; 2.46.2 **Mean age (range)**: 11 **Ethnicity**: 1. 86.4% Caucasian; 10.4% African American, 1.9%other minority and 1.3% no race indicated. 2. 87.9% Caucasian; 10.3% African American, .7% other minority and 1.2 no race indicated. **Baseline drinking behaviours**:	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: MANOVA **Unit of allocation:** N/A **Unit of analysis:** Individual **Time to follow-up**: Post test **Other details:** **Baseline comparability** **Groups balanced at baseline:** No or not reported **Comments**: **Attrition** **Number of participants completing study**: **Reasons for non-completion**:	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** After the first year of intervention Males reported greater frequency of alcohol use than females $p < 0.05$. No effects of family status on alcohol drinking After the second year intervention (delivered approx 2.5 yrs later) students from single parent households reported significantly less alcohol use, but no gender effect

Study details	Intervention and population details	Analyses	Results
Spoth et al (2002; 2005) RCT (cluster) + **Objective:** To evaluate the substance use initiation effects of an intervention combining family and school-based competency-training intervention components. **Setting:** School + other, School and family **Country:** USA **Funding source:** National Institute on Drug Abuse, National Institute of Mental Health	**Intervention details** **Name**: LST + Strengthening Families Programme 10-14; LST only **Focus/aim**: Alcohol, tobacco and cannabis **Programme type**: SFP: parental skills training, youth pro-social and peer resistance skills; LST: social resistance, self management and social skills **Theoretical base**: SFP 10-14: biopsychosocial model and "other empirically based family risk and protective factor models"; LST: social learning theory and problem behaviour theory **Key components**: SFP: discussions, skill-building activities, videotapes, and games; LST: couching, facilitating, role modelling, feedback and reinforcement, and homework (behavioural rehearsal) **Providers/delivers**: Other, SFP: facilitators; LST: Teachers **Length**: SFP: 7 evening sessions; LST: 15 sessions **Duration**: SFP: 2 hours; LST: 40-45 mins **Intensity**: SFP: Once a week for 7 weeks; LST: 7th grade **Other details**: SFP: Families invited to participate in 4 booster sessions in 8th grade (1 year later). LST: Students participated in 5 booster sessions in the 8th grade. **Comparator**: Four leaflets mailed to families **Population details** **Inclusion**: 20% or more of households in the school district within 185% federal poverty level; community size (school district enrolment <1,200); and all middle school grades (6-8) taught at one location. **Exclusion**: NR **Total** n= 1673 (1664 because of crossovers) **Intervention**, n= LST+SFP 549; LST 621 **Comparator**, n= 494 **Male** n (%) = 53% **Mean age (range)**: 7th graders **Ethnicity**: 96% White **Baseline drinking behaviours**: Ever used alcohol: LST 55.9%; LST + SFP 57.5%; Control 46.9%	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: MANOVA **Unit of allocation:** Organisation/institution (36 schools) **Unit of analysis:** Organisation/institution **Time to follow-up**: posttest at 1 month, 1 year?, 2.5 years **Other details:** The analyses examined differences in substance use initiation after intervention delivery. [#136] Both regular alcohol use measure and weekly drunkenness were obtained from single questionnaire items. Regular alcohol use: 1 indicated use of alcohol one or more times a month and 0 indicated less frequent or no use; Drunkenness: 1 indicated drunkenness one or more times per week; 0 indicated lower than once a week. **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: More dual parent families in control group (controlled for in analyses) **Attrition** **Number of participants completing study**: 1563 at PT, 1372 (82%) at FU **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** New user rates at the follow-up assessment (LST; LST+SFP; control) Alcohol: 35.2%; 25.7%; 36.7% Significantly fewer students in the LST + SPF group were 'new users' at follow-up relative to the control and LST only groups (both p≤0.05). Compared to control, the relative reduction rate was 30% for students receiving LST + SFP and 4.1% for students receiving LST only. [#136] Adjusted means (SE) at 2.5 year follow-up (LST; LST+SPF; control) Regular alcohol use: 0.229 (0.025); 0.198 (0.025); 0.240 (0.026) Weekly drunkenness: 0.038 (0.011); 0.034 (0.010); 0.056 (0.011) There were no statistically significant intervention effects on regular alcohol use. Adjusted mean scores on weekly drunkenness were significantly lower for the LST+SPF group compared to control (p=0.03). Only a marginal difference between the LST only group and control.

			There was no difference in the observed rates of growth of regular alcohol use and weekly drunkenness between either intervention group or the control group.

Study details	Intervention and population details	Analyses	Results
Spoth et al (2008) RCT (Cluster) ++ **Objective:** Long term outcomes of the effectiveness of LST delivered in combination with SFP **Setting:** School, family **Country:** USA **Funding source:** NIDS	**Population details** **Inclusion**: Students and their parents enrolled in 36 schools (20% + of school district households eligible for the free or reduced cost school lunch program; school district enrolment <1200; and all middle school grades taught at one location) **Exclusion**: NR **Total** n= 1,654* students **Intervention**, LST + SPF n= 543; LST n=622 **Comparator**, n= 489 **Male** n (%) = 53% **Mean age (range)**: **Ethnicity**: 96% White; 4% other **Other baseline:** NR **Intervention details** **Name**: LST + SFP:10-14 **Focus/aim**: Prevent initiation and promote cessation of substances, including alcohol **Programme type**: Substance use prevention **Theoretical base**: Social learning theory **Key components**: Social resistance, self management, general social skills; family skills training, communication, limit-setting **Providers/delivers**: Teachers **Length, duration**, **intensity**: 15 x 40 min LST + 5 booster session 1 year post intervention, 7 x SFP:10-14 **Other details**: None **Comparator**: LST alone; information leaflets on teenage development	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Multilevel ANCOVA; repeated measures analysis **Unit of allocation:** School **Unit of analysis:** Individual **Time to follow-up**: 6 follow ups, ending +5.5 years **Other details:** Schools included as a random factor in analyses **Baseline comparability** **Groups balanced at baseline:** **Comments**: **Attrition** **Number of participants completing study**: n=1,237 (73.8%) at +5.5 years **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Substance Initiation Index: significant intervention effects on 12th grade adjusted mean levels and on linear growth for both the LST (12th grade mean level, p<0.01; linear growth, p<0.05) and the LST + SFP 10–14 (12^{th} grade mean level, p<0.05; linear growth, p < 0.05) conditions versus the control condition; intervention condition students demonstrated lower mean levels in 12th grade and a slower rate of increase across time. Alcohol initiation analyses showed that the 12th grade mean levels of AI did not differ significantly between conditions; however, the rate of change in AI differed by condition, with both intervention condition schools showing a slower rate of increase over time than the control condition schools (LST versus control, p = 0.09; LST + SFP 10–14 versus control, p < 0.05) The rate of change across time in drunkenness initiation also differed between conditions, with schools in both intervention conditions showing a significantly slower rate of increase over time than schools in the control condition (LST versus control, p<0.05; LST + SFP 10–14 versus control, p <0.05). A marginally significant

			difference in the 12th grade adjusted mean was found, favouring the LST condition (p = 0.06). There were significant intervention effects on the overall mean levels of alcohol frequency (LST versus control, p < 0.001, LST + SFP 10–14 versus control, p < 0.05), CF (p < 0.01), MF (p < 0.01), polysubstance use (p< 0.01), and APU (p< 0.01) significantly differed across risk groups. The higher-risk intervention group students demonstrated lower overall levels on the more serious substance use variables compared with the higher-risk control group students, with the exception of drunkenness frequency, for which levels were comparable.

Study details	Intervention and population details	Analyses	Results
Sussman et al (1998); **Sun et al (2006)** RCT (cluster) + **Objective:** To present the finding of a 5 years intervention program 'Project towards No Drug Abuse' (Project TND) from South California alternative high schools between 1994 to 1999 **Setting:** School, **Country:** USA **Funding source:** National Institute on Drug Abuse	**Intervention details** **Name**: Project Towards no Drug Abuse (Project TND) **Focus/aim**: to target the use of cigarettes, alcohol, cannabis and hard drug use **Programme type**: Motivation skills decision making model **Theoretical base**: NR **Key components**: first 3 sessions encourages listening skills, next three sessions encourage alternative coping skills and final three sessions encourages making non-drug use choices **Providers/delivers**: Other, Health Staff Educators **Length**: NR **Duration**: 9 sessions **Intensity**: NR **Other details**: **Comparator**: Standard care control **Population details** **Inclusion**: Continuation High School Youth **Exclusion**: NR **Total** n= 1,578 consented to take part **Intervention**, n= 14 schools **Comparator**, n= 7 schools **Male** n (%) = 55% **Mean age (range)**: 16.8 (14-19) **Ethnicity**: 31.6% White, 49.5% Hispanic, 9% African American, 9% Other Ethnicity **Baseline drinking behaviours**: 30 day use-control (n=474) 63.6%, Mean 12.9 (sd=23.0); Class (n=571) 63.6%, Mean 11.9 (sd=20.7); SAC (n=533) 65.5%, Mean 10.9 (sd=20.6)	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Two priori orthogonal condition mean contrast **Unit of allocation:** Group **Unit of analysis:** Group **Time to follow-up**: 1yr, 2-3yrs, 4-5 yrs **Other details:** **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: **Attrition** **Number of participants completing study**: 1047 (66%) and 725 (46%) provided data at years 2/3 and years 4/5, respectively **Reasons for non-completion**: Unavailable, refusal to participate	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** No program effects were found for alcohol use. 1 year follow up. Control group (n= 318) 57.6%, Mean 8.5 (sd=20.6); Class group (n=318) 57.9%, Mean 7.8 (sd=18.3); SAC group (N=381) 60.2%, Mean 7.5 (sd=17.2). 2-3 year follow up. Control group (326) 61.2%, Mean 9.0 (sd=20.6), Class Group (N=364) 65%, Mean 9.4 (sd=21.2), SAC Group (n=357) 70.2%, Mean 9.4 (sd=20.8). 4-5 year follow up. Control Group (n=232) 73.3%, Mean 10.3 (sd=21.1), Class Group (n=243) 73.6% Mean 10.1 (sd=36.6); SCA Group (n=250) 77.4% Mean 8.9 (sd=17.3)

Study details	Intervention and population details	Analyses	Results
Sussman et al (2003) RCT (cluster) + **Objective:** To investigate and describe the findings of a 2 year follow study of a 12 session version of the intervention drug abuse program, Project Towards No Drug Abuse (TND) **Setting:** School **Country:** USA **Funding source:** National Institute on Drug Abuse	**Intervention details** **Name**: Project Toward no Drug Abuse (TND) **Focus/aim**: Prevention of drug use amongst continuation high schools **Programme type**: Motivation skills decision making model **Theoretical base**: **Key components**: Cognitive misperception correction activities, social skills, listening skills, decision making skills **Providers/delivers**: Other, Staff Health Educators **Length**: 12 sessions **Duration**: 45 min **Intensity**: NR **Other details**: Two treatment conditions (1) efficacy (health educator-led classroom program), (2) effectiveness (health educator assisted self instruction program) were compared with a standard core control condition **Comparator**: Standard care control. **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1,037 **Intervention**, n= 12 schools **Comparator**, n= 6 schools **Male**: 54% **Mean age (range)**: 16.7 years (14-19 years) **Ethnicity**: 45% White, 42% Latino, 7% Asian American and 1% Other **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Linear mixed model **Unit of allocation:** Organisation/ institution (18 Schools) **Unit of analysis:** Group **Time to follow-up**: 2 years **Other details:** None **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: None **Attrition** **Number of participants completing study**: 57% standard care, 55% self instruction and 55% health educator-led. **Reasons for non-completion**: Unable to contact, refusal to continue.	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Health educator led condition showed favoured a positive program effect on alcohol use, but this was not statistically significant. (1) Programme efficacy, no significant interactions for pre test drug use or gender for alcohol (2) Programme effectiveness no evidence that the self instructed program exerted any effects after 2 years.

Study details	Intervention and population details	Analyses	Results
Warren et al (2006) RCT (cluster) + **Objective:** To determine if exposure to two communication-oriented activities, videotapes and public service announcements (PSA), accounts for changes in substance use among adolescents participating in the Drug Resistance Strategies Project's Keepin' it REAL adolescent substance use prevention curriculum. **Setting:** School **Country:** USA **Funding source:** NIDA	**Intervention details** **Name**: Keepin' it REAL **Focus/aim**: Reduce substance use **Programme type**: Drug resistance skills **Theoretical base**: narrative theories, social learning theories, communication competence theories **Key components**: Resistance and avoidance skills delivered through classroom videotapes and televised public service announcements. **Providers/delivers**: Teachers, **Length**: 6 months **Duration**: PSAs 30 seconds each **Intensity**: 10 lessons **Other details**: **Comparator**: Local substance use prevention program **Population details** **Inclusion**: Middle schools in Phoenix **Exclusion**: **Total** n= 4,734 (35 schools) **Intervention**, n= 70% **Comparator**, n= 30% **Male**: 53% **Mean age (range)**: 7th grade **Ethnicity**: 55% Mexican American, Mexican or Chicano, 17% other Latino, 19% white, 9% African American. **Baseline drinking behaviours**: # of drinks Control - M=1.88, SE=0.10; 0-3 videos - M=1.99, SE=0.09; 4-5 videos - M=1.87, SE=0.05 # of days Control - M=1.42, SE=0.04; 0-3 videos - M=1.53, SE=0.05; 4-5 videos - M=1.45, SE=0.03	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANCOVA **Unit of allocation:** Organisation/institution **Unit of analysis:** Individual **Time to follow-up**: 14 months **Other details:** **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**:	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** # of drinks in the past 30 days (adjusted group mean difference, SE) 0.-3 videos versus control - -0.11, 0.13 (NS) 4-5 videos versus control - -0.20, 0.09 (NS) 0-3 videos versus 4-5 videos - -0.10, 0.12 (NS) No statistically significant differences between students seeing PSAs one or more times, and students who reported that they had not seen any PSA # of drinking days in the past 30 days 0-3 videos versus control - -0.12, 0.06 (NS) 4-5 videos versus control - -0.17, 0.04 (NS) 0-3 videos versus 4-5 videos - -0.05, 0.06 (NS) No statistically significant differences between students seeing PSAs one or more times, and students who reported that they had not seen any PSA

Alcohol: brief behavioural or single session interventions – alcohol specific/substance use

Study details	Intervention and population details	Analyses	Results
Argentos (1991) CBA - **Objective:** To design, implement and evaluate a 9th and 10th grade drug and alcohol prevention programme. **Setting:** School **Country:** USA **Funding source:** NR	**Intervention details** **Name**: Programme "Kickoff" (during Red Ribbon Week) **Focus/aim**: Alcohol and drug use **Programme type**: social marketing, abstinence programme **Theoretical base**: Social learning theory **Key components**: motivational speaker, prevention curriculum, group discussion and role-play, t-shirts promoting drug free lifestyle **Providers/delivers**: External, motivational speaker **Length**: motivational speaker for 2 days, 1 week curriculum **Duration**: 6 hours a day **Intensity**: 36 hours across the week **Other details**: Teachers participated in 12 hours of inservice training. Classroom teachers identified a core team of 6 student leaders to attend a summer programme, Project REACH. Staff and students planned periodic "t-shirt" days. **Comparator**: No intervention **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 350 **Intervention**, n= 280 (140 pre-tested) **Comparator**, n= 70 (35 pre-tested) **Male** n (%) = NR **Mean age (range)**: NR **Ethnicity**: NR **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANOVA **Unit of allocation:** N/A **Unit of analysis:** Individual **Time to follow-up**: PT, 6 months **Other details:** Adaptation of Duryea's Alcohol Attitudes and Behaviour questionnaire used. **Baseline comparability** **Groups balanced at baseline:** No or not reported **Comments**: No details reported **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**: NR	**Knowledge and understanding** Compared to students in the control group, intervention students demonstrated significantly higher levels of understanding about popular myths regarding alcohol use and other drugs. **Attitudes and values** Compared to students in the control group, intervention students reported an increased belief that their alcohol (and other drug) use might result in serious consequences ($p<0.01$) **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** No significant differences observed between treatment and control students. Mean for alcohol use Control group (n=70) Pre-test (n=35): 1.34 No pre-test (n=35): 1.91 Intervention group (n=269) Pre-test (n=129): 1.36 No pre-test (n=140): 1.39

Study details	Intervention and population details	Analyses	Results
Dempster et al (2006) NRCT - **Objective:** To evaluate the effectiveness of an orofacial trauma-based brief intervention, designed to raise adolescent males' awareness about the immediate dangers of binge drinking. **Setting:** School **Country:** UK **Funding source:** British Academy	**Population details** **Inclusion**: Pupils in five schools **Exclusion**: NR **Total** n= 182 **Intervention**, n= 133 **Comparator**, n= 49 **Male** n (%) = 100% **Mean age (range)**: 15-16 years **Ethnicity**: NR **Other baseline:** 87% had drunk alcohol in their lifetime; 48% were classified as binge drinkers **Intervention details** **Name**: NR **Focus/aim**: To communicate to young people the dangers of binge drinking **Programme type**: Alcohol brief intervention **Theoretical base**: Theory of Planned Behaviour **Key components**: PowerPoint presentation and accompanying dialogue; summarised regional statistics, and included photographs of selected actual cases of individuals with facial trauma **Providers/delivers**: Other **Length, duration**, **intensity**: 20 mins **Other details**: None **Comparator**: No intervention	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Chi squared, ANCOVA **Unit of allocation:** School? **Unit of analysis:** Individual **Time to follow-up**: PT, 1 month **Other details:** **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: NR **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** At one month follow-up, compared to the control group, the intervention group appraised binge drinking behaviour more negatively (p<0.001) and believed more strongly that they could control their binge drinking behaviour (p=0.001). Intervention group tended to show a stronger intention to stop binge drinking than the control group (p=0.083). **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** At follow-up, 17% (11/64) of baseline binge drinkers in the intervention group were no longer binge drinking compared to approximately 6% (1/18) of control binge drinkers (NS; p=0.217). There was also no statistically significant difference between intervention and control groups in terms of the number of units of alcohol consumed in a single session at one month follow-up (p=0.21).

Study details	Intervention and population details	Analyses	Results
Werch and Carlson (1996) RCT (Individual) ++ **Objective:** Examined the effects of a brief nurse consultation (STARS Program) **Setting:** School, **Country:** USA **Funding source:** National Institute on Alcohol Abuse and Alcoholism	**Intervention details** **Name**: STARS Programme **Focus/aim**: To examine the effects of brief nurse consultations on use. **Programme type**: Behaviour change **Theoretical base**: Multi-component Stages (McMos) prevention model. Health belief model, social learning theory and behavioural self-control. **Key components**: A brief health consultation, six focused weekly follow up consultations. **Providers/delivers**: School nurses **Length**: Six weeks **Duration**: NR **Intensity**: Once a week **Other details**: **Comparator**: No intervention **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 138 **Intervention**, n= 68 **Comparator**, n= 70 **Male** n (%) = 41% **Mean age (range)**: 8th grade 12.2 (SD 1.16) **Ethnicity**: 84% African American, 13% Caucasian and 3% other. **Baseline drinking behaviours**: Intervention: Alcohol frequency 0.15; Alcohol quantity 0.15; heavy alcohol use 0.03; drinking consequences 9.41, Intentions 5.43. Control: Alcohol frequency 0.15; alcohol quantity 0.18; heavy alcohol use 0.03; intentions 4.93, consequences 9.05, intentions 4.93.	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) Validated with a dipstick saliva test. **Statistical method(s) used to analyse data**: Two tailed t tests **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: + 3 months **Other details:** Alpha coefficient for alcohol use .85, .71 for heavy drinking and .88 for alcohol consequences. **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: Balanced except for free school lunch participation (more control students reported receiving a free school lunch). **Attrition** **Number of participants completing study**: 90% (124) **Reasons for non-completion**: NR, although 50% of drop outs reported family alcohol or drug problem.	**Knowledge and understanding** NR **Attitudes and values** Alcohol use and risk measures by group (post test) means Intervention and control Drinking consequences 9.58 and 9.33 NS Intentions: 6.05 and 6.13 NS *Greater scores indicate greater alcohol risk **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Intervention: 30 day use 5% Seven day use 4% 30 day heavy use 0% Control: 30 day use 10% Seven day use 12% 30 day heavy use 5% None of the above results were significant. Alcohol use and risk measures by group (post test) means Alcohol frequency intervention 0.16 and control 0.39 (ns) Alcohol quantity 0.13 and control 0.25 (ns) Heavy alcohol use 0.00 and control 0.10 (p=.02) *Greater scores indicate greater alcohol risk

Study details	Intervention and population details	Analyses	Results
Werch et al (1996) RCT (Individual) + **Objective:** Evaluation of brief school based intervention for preventing alcohol use **Setting:** School **Country:** USA **Funding source:** NIAAA	**Intervention details** **Name**: STARS **Focus/aim**: NR **Programme type**: Behavioural change, multi-component motivational stages prevention model **Theoretical base**: Transtheoretical model of change, Health Belief Model, Social Learning Theory and Behavioural Self-Control. **Key components**: BI, self-instructional module and audiotape, health consultation, follow-up consultation **Providers/delivers**: Other, Physician, School nurses **Length**: One session. **Duration**: 10 mins for the consultation, 9 minutes for the peer follow-up consultation. 7 minutes for the module. 8 minutes for the control intervention. **Intensity**: NR **Other details**: **Comparator**: Alcohol booklet **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 104 **Intervention**, n= 52(50%) **Comparator**, n= 52 (50%) **Male** n (%) = 44% **Mean age (range)**: 6th to 8th grade. 13.8 (SD 0.87)	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report), and validated using a dipstick saliva pipeline procedure. **Statistical method(s) used to analyse data**: Chi square; t test; ANCOVA **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: post test, +10 weeks **Other details:** Alcohol acquisition in the last year was measured using 5 items – coefficient was .78. Heavy drinking is defined as drinking five or more drinks in a row in the last two weeks. The coefficient for the risk factor items was 0.75. Study does not fully explain the mean scores' definitions. **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: **Attrition** **Number of participants completing study**: 101 (97%) **Reasons for non-completion**: Two in the intervention group could not be	**Knowledge and understanding** NR **Attitudes and values** 8th graders in the intervention group reported fewer peer expectations, less intention to use alcohol in the future, less intention to try alcohol and predicted less intention to use alcohol. Mean (SD) If offered alcohol would drink: Baseline: I: 1.58 (0.87) C: 1.55 (0.67) Post 1.67(1.05); 1.62 (0.92), p < 0.05 intervention x lifetime use interaction Follow up 1.52 (1.01); 1.69 (0.99), NS Magazine ads make me want to drink Baseline I: 1.56 (0.87) C: 1.54 (0.80) Post test 1.69(1.05); 1.80 (1.04); p < 0.05 intervention x lifetime use interaction Follow up 1.73 (1.12); 1.71 (1.07), p < 0.05intervention x lifetime use interaction How many adults drink alcohol Baseline I: 1.94 (0.80) C: 2.04 (0.77) Posttest1.90 (0.90); 2.02 (0.79), NS Follow up 1.60 (0.64) .2.04 (0.74), p < 0.05 main intervention effects Resist an offer to drink at a party Baseline I: 2.10 (1.38) C: 2.13 (1.25) Post test 1.94 (1.32); 2.14 (1.20), NS Follow up 2.29(1.44); 2.48 (1.35) How would your friends feel if you drank I:2.16 (1.11); C:2.38 (1.03) 1.98 (1.08); 2.33 (1.01), p < 0.05 intervention x grade interaction 1.94 (1.04); 2.09 (1.06) p < 0.05 intervention x lifetime use interaction Will you plan to use alcohol in 6 months 1.40 (0.89); 1.47 (0.81) 1.51 (1.03); 1.46 (0.86), p < 0.05 intervention x grade interaction 1.19 (0.61); 1.48(0.99), p < 0.05 intervention x sex interaction

	Ethnicity: 88% African American; 10% white **Baseline drinking behaviours**: Intervention group: 26 reported lifetime alcohol use, 10 annual use, 5 monthly and 1 weekly. Total number responses = 42. Control group: 31 reported lifetime alcohol use, 17 annual use, 4 monthly use and 2 weekly use. Total number responses = 54 (for 52 participants). Pretest alcohol measures by group. INTERVENTION GROUP mean (SD) 30 day alcohol quantity 0.12 (0.33) 30 day alcohol frequency 0.19 (0.56) Recent alcohol use 2.09 (0.36) Heavy drinking 0.10 (0.30) CONTROL GROUP mean (SD) 30 day alcohol quantity 0.27 (0.72) 30 day alcohol frequency 0.17 (0.62) Recent alcohol use 2.12 (0.39) Heavy drinking 0.17 (0.47)	reached and one in the control group was eliminated because of accidental exposure to the intervention.	Will you try alcohol in 6 months 1.42 (0.87); 1.50 (0.85) 1.49(1.03); 1.53(0.90), p < 0.05 intervention x grade interaction 1.23(0.72); 1.56(1.01), NS Will you use alcohol in 6 months 1.31 (0.78); 1.41 (0.73) 1.50(1.07); 1.45(0.81) p < 0.05 intervention x grade interaction 1.15(0.55); 1.38(0.84), NS Will you stop or reduce your drinking in 6 months 2.42 (1.73); 2.08 (1.43) 1.88(1.57); 2.37(1.73), p < 0.05 intervention effect 2.21(1.73); 2.58(1.83), NS Likely to get sick if drunk 1.94 (1.24); 2.10 (1.40) 1.61(1.11); 2.20(1.33), p < 0.05 main intervention effect 1.52(1.07); 1.92(1.30), NS Likely to become addicted by drinking often 2.46 (1.36); 2.19 (1.39) 1.92(1.29); 2.33(1.44), NS 1.90(1.28); 2.35(1.44) main intervention effect Likely to avoid injury by not drinking 2.04 (1.34); 2.18 (1.40) 1.63(1.06); 1.75(1.18), NS 1.69(1.15); 1.92 (1.27), intervention x lifetime use interaction How many of your friends drink alcohol? 1.79 (1.07); 1.87 (1.10) 1.73 (1.04); 1.71 (0.94), NS 1.54(0.87); 1.83(1.12), NS **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Mean (SD) Significant reduction in last month alcohol quantity at follow up

			Intervention: 0.08 (0.27); Control: 0.44 (0.93), $p < 0.05$. Insignificant at posttest - I: 0.13 (0.44). C: 0.44 (0.93). No sig effects on heavy drinking Post I: 0.10(0.30); C: 0.17(0.51) Follow up : 0.04(0.20); C: 0.18(0.48) Insignificant reduction in 30 day alcohol frequency at post test I: 0.10 (0.30); C: 0.19 (0.53); and but significant at follow up I: 0.06 (0.24); C: 0.37 (0.92), $p < 0.05$ Insignificant reduction in recent alcohol use at post test I: 2.20 (0.49); C: 2.18 (0.43) and follow-up I: 2.04 (0.29) C: 2.20 (0.49).

Study details	Intervention and population details	Analyses	Results
Werch et al (1998) RCT (Individual) + **Objective:** To examine the effects of a brief, pilot alcohol prevention intervention. **Setting:** School + other, Family **Country:** US **Funding source:** National Institute on Alcohol Abuse and Alcoholism	**Intervention details** **Name**: STARS for families programme **Focus/aim**: Alcohol **Programme type**: Brief intervention, family-based **Theoretical base**: Health Belief Model, Social Cognitive Theory, Behavioural Self-Control Theory, McMOS **Key components**: brief one-on-one health consultation, letter to parent/guardian, family-based prevention lessons **Providers/delivers**: Other, Nurse **Length**: Not clear **Duration**: Not clear. Average length of BI 16.9 mins. **Intensity**: 2-9 family lessons based on risk factor status, one BI. One lesson sent home in the first week, then two a week. **Other details**: **Comparator**: 15-page alcohol education self-instruction booklet **Population details** **Inclusion**: None reported **Exclusion**: None reported **Total** n= 211 **Intervention**, n= 106 **Comparator**, n= 105 **Male** n (%) = 50% **Mean age (range)**: 12.08 (SD 0.96). 6th grade **Ethnicity**: African American 85%; Caucasian 12%; other 3%	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report), validated with saliva dipstick sample. **Statistical method(s) used to analyse data**: Chi-squared analyses (dichotomous variables) and t-tests and ANCOVAs for continuous measures. **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: + 1 year **Other details:** 77-item Youth Alcohol and Drug Survey **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: Groups well matched **Attrition** **Number of participants completing study**: PT: n=187 (89%), n=18 intervention and n=6 control; **Reasons for non-completion**: 1 yr: n=147 (70%). Dropouts older and more likely to have initiated alcohol use. Some did not complete the baseline questionnaire because they had been transferred, suspended or expelled. Four people from second dropout were excluded because their answers were inconsistent.	**Knowledge and understanding** NR **Attitudes and values** Alcohol stage at posttest (intervention n=88; control n=99) Pre-contemplation: 79 (90%); 89 (89%); Contemplation: 3 (3%); 4 (4%); Preparation: 1 (1%); 2 (2%); Action: 1 (1%); 3 (3%); Maintenance: 3 (3%); 2 (2%) Alcohol stage at follow-up (intervention n=72; control n=70) Pre-contemplation: 68 (93%); 65 (93%); Contemplation: 0; 1 (1%); Preparation: 1 (1%); 0; Action: 2 (3%); 0; Maintenance: 2 (3%); 4 (6%) **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Posttest (intervention n=88; control n=99) 30-day use: 5 (6%); 7 (7%) 7-day use: 12 (14%); 9 (9%) 30-day heavy use: 5 (6%); 7 (7%) 2 week heavy use: 6 (7%); 6 (6%) Follow-up (intervention n=73; control n=70) 30-day use: 5 (7%); 3 (4%) 7-day use: 6 (8%); 3 (4%) 30-day heavy use: 4 (5%); 1 (1%) 2 week heavy use: 4 (5%); 3 (4%) Posttest (intervention; control): mean (SD) Alcohol frequency: 0.28 (0.74); 0.39 (1.46) Alcohol quantity: 0.35 (1.15); 0.35 (1.11) "Heavy" alcohol use: 0.22 (0.95); 0.17 (0.74)

	Baseline drinking behaviours: Lifetime alcohol use: Int n=27 (26%); Con n=28 (27%). Pre-contemplation stage: Int n=89 (84%). Control n=91 (87%)		Follow-up (intervention; control): mean (SD) Alcohol frequency: 0.31 (1.12); 0.20 (0.81) Alcohol quantity: 0.26 (1.01); 0.16 (0.80) "Heavy" alcohol use: 0.16 (0.66); 0.10 (0.50)

Study details	Intervention and population details	Analyses	Results
Werch et al (2000) RCT (Individual) + **Objective:** Evaluation of STARS for Families **Setting:** School **Country:** USA **Funding source:** NIAAA	**Intervention details** **Name**: STARS for Families **Focus/aim**: Alcohol **Programme type**: Behavioural Change **Theoretical base**: Transtheoretical model of change, multi-component motivational stages prevention model (McMOS). **Key components**: Brief intervention with nurse, homework, postcards sent to parents **Providers/delivers**: Other, School nurses **Length**: 2 years **Duration**: BI + postcards + lessons **Intensity**: two BIs (a year apart) of approx 20 minutes; one postcard each week for 10 weeks and 4 take home lessons **Other details**: **Comparator**: Two alcohol booklets **Population details** **Inclusion**: NR **Exclusion**: NR **Total** At baseline, n= 650 **Intervention**, NR **Comparator**, NR **Male** n (%) = 50% **Mean age (range)**: 12.08 **Ethnicity**: 85% African American; 12% Caucasian; Other 3% **Baseline drinking behaviours**:	**Reasons for non-completion**: Failure to complete post-test questionnaire. No interaction effects were found on any baseline alcohol use measures for subjects between group and dropout status. **Process details** **Data collection method(s)**: Questonnaire/Survey (self-report) plus validated by dip-stick. **Statistical method(s) used to analyse data**: Chi square; t-test; MANOVA **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: + 3 months **Other details:** Nurses received one day of training. **Baseline comparability** **Groups balanced at baseline:** Yes **Comments:** **Attrition** **Number of participants completing study**: 79% (515 – comparator: 261 or 50.7%; intervention 254 or 49.3%)	**Knowledge and understanding** NR **Attitudes and values** No sig difference in contemplation; preparation; action; maintenance **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Significantly fewer intervention magnet-school students initiated alcohol use, drank heavily during last 30 days or drank over any period of time compared to minimal intervention control students (p< 0.05). Fewer intervention students drank for any length of time (9 vs 18%) p < 0.05 Fewer intervention students drank heavily in the prior 30 days (4 vs 9%), p < 0.05 No sig difference in 7, 30, or 30 day heavy use Fewer intervention students were in more advanced stages of alcohol initiation (7% vs 16%), p < 0.05

Study details	Intervention and population details	Analyses	Results
Werch et al (2000b) RCT (Individual) + **Objective:** Feasibility and efficacy of alcohol BI **Setting:** School and families **Country:** USA **Funding source:** NIDA	**Intervention details** **Name**: STARS for Families intervention **Focus/aim**: Reduce alcohol use **Programme type**: Brief Intervention, postcards **Theoretical base**: MI, Social Cognitive Theory **Key components**: Feedback included info on susceptibility; perceived benefits; expectations; self efficacy; normalisation; observational learning; self-evaluation **Providers/delivers**: **Length**: 5 weeks **Duration**: 20 minute session + 5 weeks of postcards **Intensity**: 1 BI session, 5 weeks of postcards **Other details**: Cost of the program was estimated at $16.13 per student (based on $25 per hour nurse rate, $0.50 per postcard printing and $0.28 per postcard mailing charge). **Comparator**: No intervention **Population details** **Inclusion**: Students presenting for school sports **Exclusion**: NR **Total** n= 178 **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = 51.7 **Mean age (range)**: 13.1 (SD1.00). 7-th to 9th grade **Ethnicity**: 74.7% white; 13.5% African American **Baseline drinking behaviours**: 55.1% lifetime use; 28.1% last year use	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report), plus saliva dipstick to validate the answers. **Statistical method(s) used to analyse data**: Chi square **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: + 6 months **Other details:** 93% nurses rated consultation of effective or very effective; 99% enthusiastic or very enthusiastic; 91% believed students were responsive or very responsive to consultations; 96% rated consultation as smooth or very smooth. Alpha coefficients: .80 for alcohol use frequency, .75 for intentions to use alcohol. **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: At baseline, greater number of intervention students reported lifetime alcohol use or intentions to use **Attrition** **Number of participants completing study**: 92% (163) **Reasons for non-completion**:	**Knowledge and understanding** NR **Attitudes and values** Fewer intervention youth intended to use alcohol in next 6 months (5.5 vs. 19.2%; $p < 0.05$) **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Fewer intervention youth drank during previous month (3.6 vs 17.3%, $p < 0.05$); fewer drank heavily (0 vs 9.6%, $p < 0.05$). No significant effects on last week drinking.

Study details	Intervention and population details	Analyses	Results
Werch et al (2001) RCT (Individual) + **Objective:** Evaluation of STARS **Setting:** School and family **Country:** USA **Funding source:** NIAAA	**Intervention details** **Name**: STARS for Families **Focus/aim**: **Programme type**: As before **Theoretical base**: Social cognitive theory **Key components**: Brief consultations and 10 postcards sent out to parents/guardians. **Providers/delivers**: Other, School nurse **Length**: One session. **Duration**: As before **Intensity**: 18 mins BI **Other details**: Nurses received a one-day training session. Parents sent an average of 6.49 postcards. **Comparator**: Alcohol leaflet – which took 8.7 minutes on average to read. **Population details** **Inclusion**: As before **Exclusion**: As before **Total** n= 650 **Intervention**, n= 272 post test **Comparator**, n= 258 post test **Male** n (%) = 45.4-59.3% depending on schools. 50% overall. **Mean age (range)**: 6th grade. 12.08 (SD 0.96) **Ethnicity**: 85% African American; 12% Caucasian **Baseline drinking behaviours**: Neighbourhood school (where the pupils are from the local area; Magnet school (where they are based in) 23.6-33.78% lifetime alcohol use; 12.6-13.9% LYP	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) and validated with a dipstick saliva pipeline procedure. **Statistical method(s) used to analyse data**: Chi square, t-test, MANOVA **Unit of allocation:** Individual- **Unit of analysis:** Individual **Time to follow-up**: +3 months **Other details:** Heavy drinking defined as drinking five or more drinks in a row in the last thirty days and the last two week. Alpha coefficients .80 for the frequency of alcohol use items, .80 for the quantity of alcohol use items, .95 for heavy drinking, .88 for alcohol consequences and .75 for the intentions items. Items measuring like constructs were summed to create combined measures. Coefficients for motivation .92, expectancy beliefs .76, peer prevalence .47 and influenceability .82. **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: **Attrition** **Number of participants completing study**: 88% (n= 569) **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** Neighbourhood school (Intervention %; control); Magnet school (Intervention; Control) Alcohol stage Pre-contemplation (96.3; 87.2), p < 0.05; (95.5; 93.1) Contemplation/preparation (0.9; 2.8), NS; (0.6; 2.3), NS Action/maintenance (2.8; 10.1), NS; (3.9; 4.6), NS Intervention subjects had less risk for alcohol use on all risk factors measures (influenceability, peer prevalence, expectancy beliefs, motivations to avoid, total alcohol risk) than control students; however, these differences were not significant. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Neighbourhood school (Intervention %; control); Magnet school (Intervention; Control) 7 day use: (2.8; 9.2), p<0.05; (3.9; 4.0), NS 30 day use: (2.8; 10.1) p < 0.05; (5.1; 8.0), NS 30 day heavy use: (0.0; 6.4), p < 0.01; (2.8; 2.9) NS Length of drinking Do not drink: (96.3; 88.0), p < 0.05; (93.3; 93.1), NS 30 days or less: (0.9; 7.4), NS; (2.8; 1.1), NS less than 6 months: (0.0; 2.8), NS; (0.6; 1.1), NS 6 months or more: (2.8; 1.9), NS; (3.4; 4.6), NS

Study details	Intervention and population details	Analyses	Results
Werch et al (2003a) RCT (Individual) + **Objective:** To examine the one year follow up effects of the STARS Program. **Setting:** School, **Country:** USA **Funding source:** National Institute on Alcohol Abuse and Alcoholism	**Intervention details** **Name**: STARS Program **Focus/aim**: Reduce alcohol use **Programme type**: Behavioural change **Theoretical base**: Behavioural change, McMOS prevention model **Key components**: Brief Interventions – one on one health consultation, prevention postcards emailed to family, family take home lessons **Providers/delivers**: Other, Nurse **Length**: 2 years **Duration**: Two 20 minutes session with the nurse each (one in spring semester, one in autumn). In the following spring semester, the four family lessons were sent out. Up to ten postcards sent out in the first spring semester. **Intensity**: Weekly **Other details**: Nurses received one day of training. **Comparator**: Minimal intervention (Booklets) **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 650 **Intervention**, n= 325 (50%) **Comparator**, n= 325 (50%) **Male** n (%) = 54% **Mean age (range)**: 11.4 (SD 0.71), 6th grade **Ethnicity**: 58% African American, 34%	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report). Validated with dipstick saliva sample. **Statistical method(s) used to analyse data**: Chi Squared, MANOVA, ANOVA, **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: + 3 years (until 8th grade). This study discusses the one year follow-up data. **Other details:** Alpha coefficient for alcohol use frequency and quantity .80, .95 for heavy drinking, .88 for alcohol consequences, .75 for the intentions items, motivations .92, outcome expectancy beliefs were .76, friends' consumption .47, influenceability .82. Total alcohol risk was constructed by adding across all risk factors, with total risk factors ranging from 0-9. **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: Some significant differences between the schools e.g. neighbourhood school pupils were more likely to female, older, African-American etc. But no significant differences	**Knowledge and understanding** NR **Attitudes and values** Neighbourhood schools; Risk factors mean (SD): Influenceability (3-12): Intervention group 4.45 (2.36) and control 4.05 (2.00) Peer prevalence (2-10): 3.88 (1.88) and 4.21 (1.89) Expectancy beliefs (0-11): 2.50 (2.19) and 2.50 (1.74) Motivation to avoid (2-8): 2.84 (1.94) and 3.19 (2.17) Total alcohol risk (0-9): 7.90 (1.87) and 8.42 (1.83). P<0.05 *Larger scores indicate greater risk. Magnet school; Risk factors mean (SD): Influenceability (3-12): Intervention group 4.04 (1.76) and control 4.44 (2.29) Peer prevalence (2-10): 4.19 (1.72) and 4.23 (1.93) Expectancy beliefs (0-11): 2.45 (2.14) and 2.79 (2.40) Motivation to avoid (2-8): 2.49 (1.17) and 3.00 (1.79) p>0.01 Total alcohol risk (0-9): 7.73 (1.83) and 8.26 (1.96). p>0.01 *Larger scores indicate greater risk. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Neighbourhood schools Alcohol initiation stage %: Pre-contemplation (85 and control 82.2); contemplation/preparation (8.0 and control 10.3); action/maintenance (7.0 and control 7.5); Plan to drink in sixth months (4 and control 8.4); Ever tried alcohol (38 and control 44.9); 7 day use (10 and control 11.2); 30 day use (10 and control 13.2); 30 day use (6 and control 9.3).

	Caucasian and 8% other **Baseline drinking behaviours**: At pre-test no significant differences were found between intervention and control groups. Mean alcohol use and risk measures Neighbourhood schools (Intervention and Control): Intentions 4.60; 5.23 Alcohol frequency 0.28 and 0.23 Alcohol quantity 0.17 and 0.19 Heavy alcohol use 0.19 and 0.09 Influenceability 4.14 and 4.45 Peer prevalence 3.30 and 3.35 Expectancy beliefs 2.64 and 2.12 Motivation to avoid 3.12 and 3.16 Total alcohol risk 6.98 and 6.75 Magnet schools: (Intervention and Control): Intentions 4.74; 4.99 Alcohol frequency 0.16; 0.21 Alcohol quantity 0.12; 0.07 Heavy alcohol use 0.03 and 0.02 Influenceability 3.93 and 3.87 Peer prevalence 2.77 and 2.81 Expectancy beliefs 2.10 and 2.04 Motivation to avoid 2.31 and 2.27 Total alcohol risk 6.46 and 6.41	between control and intervention groups. **<u>Attrition</u>** **Number of participants completing study**: One year follow up (78% of sample – 507) **Reasons for non-completion**: More likely to be older and have experienced negative consequences.	Length of drinking (%): Do not drink (87 and control 83.2), <30 (or equal to) days to six months (9 and control 11.2); 6 months or more (4 and control 5.6). Alcohol use (mean) intentions 4-16: (5.34, sd2.70 and control 5.54, sd 2.94); alcohol frequency 0-12: (0.41, sd 1.36 and control 0.50, sd 1.36); alcohol quantity 0-8: (0.35, sd 0.98 and control 0.42, sd 1.12); heavy alcohol use 0-8: (0.13, sd 0.56 and control 0.28, sd 0.89); *Larger scores indicate greater risk. Magnet schools Alcohol initiation stage %: Pre-contemplation (87.2 and control 79.3); contemplation/preparation (1.3 and control 2); action/maintenance (11.4 and control 18.7, p=0.06); plan to drink in 6 months (5.4 and control 18.0, p=0.001); ever tried (54 and control 61.7); 7 day use (10.7 and control 12); 30 day use (11.3 and control 17.4); 30 day heavy use (4.7 and control 8.7). Length of drinking %: do not drink (88.7 and control 78.7. P=0.06); < 30 days (or equal to) to 6 months (3.3 and control 6); 6 months or more (8 and control 15.3). Alcohol use (mean) Intentions 4-16: (5.56, sd 2.75 and control 6.70, sd 3.77, ps>0.01); alcohol frequency 0-12 (0.37, sd 1.13 and control 0.57, sd 1.62); alcohol quantity (0.27, sd 0.92 and control 0.47, sd 1.26); heavy alcohol use 0-18 (0.11, sd 0.60 and control 0.17, sd 0.58).

Study details	Intervention and population details	Analyses	Results
Werch et al (2003b) RCT (Individual) ++ **Objective:** To assess the effects of an alcohol prevention programme in the context of a sports programme; There were 3 arms: 1 - brief sport consultation with prevention consultation (Sport); 2 sport and alcohol consultations (Sport plus); 3 sport and alcohol consultations with mailed parental materials (Sport plus parent). **Setting:** School **Country:** USA **Funding source:** National Institute on Alcohol Abuse and Alcoholism	**Intervention details** **Name**: SPORT (sport consultation) **Focus/aim**: To address alcohol use, fitness and sleeping within a physical activity programme **Programme type**: alternative activities **Theoretical base**: Social cognitive and several other theories including Multi Component Motivational Stages prevention **Key components**: Three intervention conditions: (1). Sport-based consultation alone (Sport – see Comparator) (2) Sport-based consultation plus an alcohol prevention consultation (Sport Plus) and (3) Sport-based consultation plus an alcohol prevention consultation plus set of parental educational materials (Sport Plus Parent). Sports consultation consisted of a health and fitness screen, and a consultation protocol consisting of prevention messages. **Providers/delivers**: School nurse and PE teacher **Length**: **Duration**: 1: 8.92 minutes (sd.2.53), 2: 25.87 (sd.5.59) **Intensity**: **Other details**: A sample of 32 audiotaped consultations was also assessed. **Comparator**: Brief sport consultation (Sport) **Population details** **Inclusion**: Ability to read baseline instrument; signed informed consent **Exclusion**: 11 (2%) were excluded because they could not read baseline instrument **Total** n= 454 **Intervention**, Sport Plus n= 150; Sport Plus Parent n= 152 **Comparator**, Sport n= 152 **Male** n (%) = 37.9% **Mean age (range)**: 13.2 yr, SD 0.5 **Ethnicity**: 50.7% White, 36.3% African American; 12.9% 'other'. **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (Validated) **Statistical method(s) used to analyse data**: ANOVA **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: 1 school term for the interventions and 3 months post intervention questionnaire follow-up **Other details:** Youth Alcohol and Health Survey and physical activity questionnaires were used. **Baseline comparability** **Groups balanced at baseline**: No **Comments**: Participants receiving the Sport Plus intervention reported more problems with alcohol at baseline. **Attrition** **Number of participants completing study**: 444 (98%) **Reasons for non-completion**: Data are presented for all 454 students, but 10 (2%) students not successfully followed up at 3 months	**Knowledge and understanding** NR **Attitudes and values** Negative expectancy beliefs improved over time (greater increase among those in the Sport Plus Parent condition), and environmental availability increased and perceived peer prevalence decreased (Sport intervention group only). **Personal and social skills** Self-control improved over time (greater increase among those in the Sport Plus Parent condition) **Health and social outcomes related to alcohol and sexual health** Significant time effects were found on 3 of 6 alcohol use measures; 30-day heavy drinking, alcohol use initiation and alcohol problems declined over time across all groups. No difference between interventions was observed. Maximum effect was observed in pre-test drinking adolescents who used the Sport package.

Study details	Intervention and population details	Analyses	Results
Werch et al (2005a) RCT (Individual) + **Objective:** Evaluation of single vs multidrug intervention on alcohol use **Setting:** School and family **Country:** USA **Funding source:** NIAAA	**Intervention details** **Name**: STARS for Families **Focus/aim**: Reduce alcohol use **Programme type**: Behaviour change **Theoretical base**: Health belief model; social cognitive theory; behavioural self control **Key components**: Health consultation; postcards to parents STARS for families (Alcohol only): brief one-on-one consultation with a nurse, and prevention postcards sent to parents. STAR plus (multiple drug intervention): same components for STARS for families but the prevention messages also addressed cigarettes, marijuana and other drugs as well as alcohol. **Providers/delivers**: Other, School nurse **Length**: 4 weeks; single BI then 4 weekly sets of postcards **Duration**: average of 21.9 mins consultation (STARS for families 20.9, STARS plus 23 mins) **Intensity**: Single session **Other details**: Nurses received two days training **Comparator**: STARS Plus; Postcards only **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 448 **Intervention**, n= 150 (33.5%) **Comparator**, n= 149 STARS Plus (33.3%); 149 Postcards only (33.3%) **Male** n (%) = 48% **Mean age (range)**: 13.4 (SD 0.61), 8th grade students **Ethnicity**: 59.4% Caucasian; 27.7% African	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANOVA, chi-squared **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: + 3 months **Other details:** 30 day frequency: 1 = 0, 2=1-2 days, 3=3-5 days, 4=6-9 days, 5=10-19 days, 6=20-29 days, 7=30 days. Quantity of alcohol: 1=I do not drink, 2= 1I drink, 3=2 drinks, 4=3 drinks, 5=4 drinks, 6=5 drinks or more. Heavy alcohol use: 1=none, 2=1-2 times, 3=3-5 times, 4=6-9 times, 5=ten or more times. **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: Groups similar except for prevalence of ever stealing. A lesser percentage of youth had ever stolen in the STARS group and postcards group compared to STARS plus. **Attrition** **Number of participants completing study**: 433 (96.7%) **Reasons for non-completion**: One participant's survey was omitted because of	**Knowledge and understanding** NR **Attitudes and values** Peer alcohol susceptibility - 1.37 (0.06); 1.53 (0.06); 1.60 (0.06) = p < 0.05, lower in STARS Alcohol incompatibility - 1.58 (0.09); 1.91 (0.09); 1.80 (0.09) = p < 0.05, lower in STARS **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** 1. Alcohol consumption did not differ significantly across groups. 30-day frequency of alcohol use approached significance, with less frequent current alcohol consumption among STARS youth (mean = 1.18), compared to STARS Plus (mean = 1.36) and Postcard Only (mean = 1.32) youth, p = 0.07. Figures are adjusted means (SE) 30 day alcohol frequency - 1.18 (0.05); 1.36 (0.06); 1.32 (0.06) P<0.1 30 day quantity - 1.22 (0.06); 1.40 (0.06); 1.30 (0.06) Heavy alcohol use - 1.05 (0.02); 1.07 (0.02); 1.01 (0.02) 2. Significant main effects, adjusted for baseline substance use, were found for intervention status. Mean adjusted 30-day frequency of alcohol use was lower for STARS students (mean = 1.25), than for Postcard Only (mean = 1.77) and STARS Plus students (mean = 1.60), p < 0.05. Frequency of alcohol use-related problems was lower for STARS (mean = 1.02) and STARS Plus subjects (mean = 1.12), than Postcard Only subjects (mean = 1.97), p < 0.05. Controlled for baseline alcohol use: 30 day alcohol frequency - 1.07; 1.25; 1.20; p < 0.05 Significant main effect of group 30 day alcohol quantity 1.16; 1.32; 1.08; p < 0.05 Significant main effect of prior alcohol use (STARS; STARS Plus; Postcards):

	American; 4.5 % Hispanic **Baseline drinking behaviours**: NR	inconsistent responses on consumption measures	Alcohol use related problems - 0.78 (0.12); 0.96 (0.13); 0.86 (0.12) = NS Peer alcohol use - 1.79 (0.06); 1.98 (0.06); 1.86 (0.06) = NS

Study details	Intervention and population details	Analyses	Results
Werch et al (2005b) RCT (Individual) ++ **Objective:** To assess the effects of a multi-health behaviour intervention integrating physical activity with alcohol abuse prevention. There were two arms: 1. Project SPORT 2. Printed materials as controls. **Setting:** School **Country:** USA **Funding source:** National Institute on Alcohol Abuse and Alcoholism	**Intervention details** **Name**: Project SPORT **Focus/aim**: To associate healthy living practices with alcohol education messages **Programme type**: Behaviour change **Theoretical base**: Integrative Behavior-Image Model (BIM) **Key components**: 1 on 1 behavioural screen, 1 to 1 consultation with 7-item fitness screen, "fitness prescription", and take home literature **Providers/delivers**: Other, Nurse and fitness professionals **Length**: Not clear but based on a one off contact **Duration**: Sport consultation 12.65 min (SD 2.90) **Intensity**: One off **Other details**: **Comparator**: Generic print materials on alcohol and health administered contemporaneously with the intervention plus a pamphlet one week later **Population details** **Inclusion**: Youth and parental consent needed **Exclusion**: **Total** n= 604 **Intervention**, n= 302 **Comparator**, n= 302 **Male** n (%) = 44%	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: MANCOVA **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: 3 and 12 months post intervention **Other details:** 30 Day frequency: 1=1-2 days, 2=3-5 days, 3=6-9 days, 4=10-19 days, 5=20-29 days, 6=all 30 days; 30-Day quantity: 1=1 drink, 2=2 drinks, 3=3 drinks, 4=4 drinks, 5=5 or more drinks. 30-Day heavy use: 1=1–2 times, 2=3–5 times, 3=6–9 times, 4=10 or more times; Alcohol problems: 0-13 (high score=high risk); Length of alcohol use: 1=I do not drink alcohol, 2=Thirty (30) days or less, 3=Less than 6 months, 4=6 months or more; Stage of alcohol initiation: 1=Never will, 2=not planning to, 3=not planning in 2–3 years, 4=will probably try, 5=plan to try, 6=started using, 7=have been using **Baseline comparability** **Groups balanced at baseline**: No **Comments**: A greater proportion of control participants reported having a parent with an alcohol or drug problem **Attrition** **Number of participants completing study**:	**Knowledge and understanding** NR **Attitudes and values** At 3 months, SPORT youth reported significantly better than control youth on measures of negative expectancy beliefs (cons) (p=0.042), behavioral capability (p=0.005), perceived susceptibility (p=0.043). No intervention effects on value incompatibility. SPORT participants showed less risk for alcohol use compared to control participants, on measures of intentions to drink in the future (p=0.009), alcohol attitudes (p=0.010), and influenceability (p=0.009). No effects on expectancy beliefs (pro), subjective norms or perceived peer prevalence. At 12 months, SPORT youth reported significantly less protection on perceived susceptibility (p=0.027). Intervention participants reported significantly fewer intentions to drink in the next 6 months (p=0.058). **Personal and social skills** At 3 months, SPORT youth reported significantly better than control youth on measures of parental monitoring (p=0.045) and parent/child communication (p=0.039). No intervention effects on resistance self-efficacy, self-control or positive parent/child relationship.. At 12 months, SPORT youth reported significantly better parent/child communication (p=0.005), and positive parent/child relationship (p=0.055), compared to controls. **Health and social outcomes related to alcohol and sexual health** Estimated mean consumption - mean (SE) (intervention; control) (All ns, unless stated) 3 months 30 Day frequency: 0.38 (0.04); 0.60 (0.04); p < 0.001 30-Day quantity: 0.62 (0.06); 0.98 (0.07); p < 0.001 30-Day heavy used: 0.11 (0.03); 0.25 (0.03); p < 0.001 Alcohol problems: 1.68 (0.11); 1.73 (0.11) Length of alcohol use 1.80 (0.05); 2.05 (0.05), p < 0.01 Stage of alcohol initiation 2.97 (0.08); 3.45 (0.08), p < 0.001 12 months 30 Day frequency: 0.60 (0.06); 0.64 (0.06)

	Mean age (range): 15.24 (1.09) **Ethnicity**: 51% Caucasians, 21.5% African American; Others 27.5 % **Baseline drinking behaviours**:	584/604 (9.6%) at 3/12; 90/604 (14.9%) at 12/12 **Reasons for non-completion**: NR	30-Day quantity: 0.85 (0.08); 0.92 (0.08) 30-Day heavy used: 0.23 (0.04); 0.33 (0.04) Alcohol problems: 1.55 (0.12); 1.90 (0.13) Length of alcohol use 2.00 (0.07); 2.21 (0.06), $p < 0.05$ Stage of alcohol initiation 3.33 (0.11); 3.61 (0.11)

Study details	Intervention and population details	Analyses	Results
Werch et al (2005c) RCT (Individual) + **Objective:** Evaluation of alcohol brief intervention in current drinkers **Setting:** School **Country:** USA **Funding source:** NIAAA	**Intervention details** **Name**: Alcohol beverage-tailored programme **Focus/aim**: Change drinking patterns and perceptions in current drinkers **Programme type**: Brief intervention **Theoretical base**: NR **Key components**: Brief one-on-one alcohol risk reduction consultation, provision of prevention messages matched to 6 alcoholic drinks, take home materials **Providers/delivers**: Trained research staff **Length**: NR **Duration**: NR **Intensity**: NR **Other details**: Research staff received a full, 2-day training programme. **Comparator**: Generic alcohol prevention brochure ("Alcohol Prevention Teen Talk: Alcohol and Risky Behaviors") **Population details** **Inclusion**: Students who reported using alcohol in the past year **Exclusion**: NR **Total** n= 232 **Intervention**, n= 115 (50%) **Comparator**, n= 117 (50%) **Male**: 41.6% **Mean age (range)**: 17.01 years (SD 0.68) **Ethnicity**: 53% White; 37% Black; 9.1% 'other' **Baseline drinking behaviours**: 60.3% had used alcohol in previous 30 days.	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: MANCOVA **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: 4 months from baseline **Other details:** Incentives for participation included gift certificates, sweets and $10 for each data collection. The 75-item High Potency Alcohol Beverage Youth survey was used to collect data on beverage-specific alcohol consumption and risk factors. **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: No difference found on any of the sociodemographic measures at baseline. **Attrition** **Number of participants completing study**: 201 (87%; 100 intervention participants and 101 control participants) **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** Univariate analyses showed that, compared to control participants, intervention participants had significantly reduced risk on the following alcohol risk factors: influenceability for beer, wine, distilled spirits, and malt liquor consumption; perceived peer prevalence for wine, flavoured coolers, and fortified wine consumption; perceived susceptibility for beer and wine consumption; and perceived severity for beer, wine and distilled spirit consumption. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Results of the MANCOVA tests revealed that there was no difference on any of the alcohol use between the intervention group and the control group at the 4-month posttest. However, univariate analyses were significant for 30-day frequency of malt liquor use (p=0.01) and 30-day quantity of malt liquor use (p=0.04). Estimated marginal mean (SE) (Intervention; Control) *p<0.05 30 day frequency Beer = 0.61(0.12); 0.86(0.12); Wine = 0.20 (0.06); 0.16 (0.06); Coolers = 0.52 (0.11); 0.58 (0.11); Fortified wine = 0.05(0.03); 0.08(0.03); Distilled spirits = 0.71(0.13); 0.79(0.13); Malt liquor = 0.10 (0.07); 0.33(0.07)* 30 day quantity Beer = 0.74 (0.12); 0.85(0.12); Wine = 0.13 (0.05); 0.17(0.05); Coolers = 0.67(0.11); 0.58(0.11); Fortified wine = 0.08(0.03); 0.08(0.03); Distilled spirits = 0.68(0.13); 0.77(0.12); Malt liquor =0.08(0.05; 0.24(0.05)* 30 day heavy use Beer = 0.19(0.06); 0.24(0.06); Wine = 0.02(0.02); 0.03(0.02); Coolers = 0.07(0.05); 0.14(0.05); Fortified wine = 0.00(0.00); 0.00(0.00); Distilled spirits = 0.17(0.07); 0.29(0.07); Malt liquor = 0.04(0.05); 0.13(0.05)

Study details	Intervention and population details	Analyses	Results
Werch et al (2008) RCT (Individual) + **Objective:** To examine whether brief intervention strategies addressing positive images are effective **Setting:** School **Country:** USA **Funding source:** National Institute of Drug Abuse	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 375 **Intervention**, contract, n=113; consult, n= 109 **Comparator**, n= 113 **Male** n (%) = 43% **Mean age (range)**: mean 17 yrs **Ethnicity**: White-49%; African American -23%; Hispanic -6% **Other baseline:** **Intervention details** **Name**: Plan for Success **Focus/aim**: General, drugs/alcohol **Programme type**: improved self image and personal development **Theoretical base**: Behaviour-image model, Prospect theory and message framing. **Key components**: Printed text and scripted messages; health promotion and avoidance of health risks. Plan for Success goal clarification survey in addition to (1) goal planning (contract); or (2) career consultation (consult). **Providers/delivers**: Personal success coaches **Length, duration**, i**ntensity**: contract and consult 20mins - no other info **Other details**: None **Comparator**: Goal survey only	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: repeated measures MANOVA, **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: PT (1-month) **Other details:** NA **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: None **Attrition** **Number of participants completing study**: n=335, 93% **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** Decreases across time on intentions to drink alcohol in the next 6 months and on length of time one has been drinking alcohol. Means(SE) image and belief measures by group and time: Group survey(GS); Group survey + contract(GCT); Group survey + consult(GCL): Alcohol interferes with other behaviours - GSpre-1.79(0.09), GSpost-1.52(0.08); GCTpre-1.80(0.09), GCTpost-1.73(0.08); GCLpre-1.82(0.09), GCLpost-1.53(0.08); P=0.001. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Means (SE) of Behaviour measures by group and time: Goal survey(GS); Goal survey + contract(GCT); Goal survey + consult(GCL):Alcohol: F = 6.33; df = 4,328; p = 0.001, Intention to use alcohol-GSpre-2.49(0.10)Gspost-2.28(0.10); GCTpre-2.46(0.10), GCTpost-2.27(0.10); GCLpre-2.44(0.11), GCLpost-2.24(0.10); P=0.001. Length of alcohol use- Gspre-2.67(0.18), Gspost-2.69(0.17); GCTpre-2.77(0.18), GCTpost-2.47(0.17); GCLpre-2.72(0.18), GCLpost-2.61(0.18), P=0.05. 30 day alcohol frequency - Gspre-2.03(0.12), Gspost-1.91(0.11); GCTpre-1.82(0.12), GCTpost-1.74(0.11); GCLpre-1.85(0.12), GCLpost-1.81(0.12), P=0.13. 30 day alcohol quantity-Gspre-3.30(0.33), Gspost-3.27(0.24); GCTpre-3.20(0.33), GCTpost-3.32(0.34); GCLpre-3.39(0.33), GCLpost-3.42(0.34), P=0.82.

Study details	Intervention and population details	Analyses	Results
Werch et al (2008b) RCT (Individual) + **Objective:** To test the efficacy of brief image-based print-mediated parent/caregiver and adolescent messages integrating physical activity with alcohol use avoidance **Setting:** School, Family **Country:** USA **Funding source:** NIAAA, NIDA	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 704 **Intervention**, n= **Comparator**, n= **Male** n (%) = 44% **Mean age (range)**: 15.24 yrs (SD 1.09) **Ethnicity**: White 49.6%; African American 21.2%; Other 29.3% **Other baseline:** 12.7% enrolled in free/reduced lunch programme; 38.7% family member with alcohol/drug problem. **Intervention details** **Name**: NR **Focus/aim**: **Programme type**: Brief intervention **Theoretical base**: Prospect theory **Key components**: Parent/ caregiver postcards, requested that the parent/caregiver take a few minutes to read and talk about each of four health and fitness facts found on the card with their teen. **Providers/delivers**: NA **Length, duration**, i**ntensity**: three postcards **Other details**: **Comparator**: Adolescent Fitness Flyers	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Repeated measures MANOVAs, factorial repeated measures MANOVAs **Unit of allocation:** Individual **Unit of analysis:** **Time to follow-up**: Four months **Other details:** **Baseline comparability** **Groups balanced at baseline:** **Comments**: **Attrition** **Number of participants completing study**: 94% followed up **Reasons for non-completion**:	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Significantly less alcohol use frequency and problems over time ($p<0.05$) among adolescents exposed to parent versus adolescent print materials. Drug using adolescents receiving parent print messages showed less alcohol frequency ($p = 0.001$) and alcohol initiation ($p = 0.004$),over time, compared to adolescents receiving fitness flyers.

Alcohol: Multi-component school and community programmes – alcohol specific/substance use

Study details	Intervention and population details	Analyses	Results
Chou et al (1998) RCT (cluster) - **Objective:** To investigate the secondary prevention effects of a substance abuse primary prevention program **Setting:** School + community and family **Country:** USA **Funding source:** National Institute on Drug Abuse, National Institute on Alcohol Abuse and Alcoholism, Research scientist Development Award from National institute on Drug Abuse.	**Intervention details** **Name**: Midwestern Prevention Program **Focus/aim**: Cigarettes, Alcohol, Cannabis **Programme type**: Social Influence **Theoretical base**: Psychosocial consequences of drug use, correction of beliefs about drug use prevention, recognition and counteraction of adult media and community influences on drug use, peer and environmental pressure resistance, problem solving **Key components**: Four Components (a) Drug resistance skills, (b) parent organisation program, (c) training of community leaders in the organisation of a drug abuse task force and (d) mass media coverage (reported elsewhere) **Providers/delivers**: Teachers, **Length**: 10 sessions **Duration**: NR **Intensity**: NR **Other details**: Control group only received components c and d **Comparator**: Health educator as usual. **Population details** **Inclusion**: 6th/7th graders in public schools or 7th graders in private schools. **Exclusion**: NR **Total** n= 3412 **Intervention**, n= 1904 **Comparator**, n= 1508 **Male** n (%) = Int 51.8%, control 49.31 **Mean age (range)**: 7th grade (at baseline) **Ethnicity**: Alcohol users only - Intervention group 85.6% white, Control group 87.93% white **Baseline drinking behaviours**: Mean use level (alcohol users only) for previous month, Intervention group 2.24 (0.04), Control group 2.29 (0.04)	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Odd Ratios, Logistic regression **Unit of allocation:** Organisation/institution (57 schools) **Unit of analysis:** Group **Time to follow-up**: 6 months, 1.5 years, 2.5 year, 3.5 year **Other details:** **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: Alcohol users only (control group n=290, intervention group n=323) **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Odds ratios (95% CI) for decreasing alcohol use among baseline users in the programme relative to the control group 6 month Follow up: 1.71*** (1.29, 2.27) 1-5 year Follow up: 1.57** (1.15, 2.13) 2-5 year Follow up: 1.33 (0.90, 1.98) 3-5 year Follow up: 1.22 (0.71, 2.09) At all 4 follow ups with repeated measured: 1.54** (1.17, 2.02) **P<.005, *** P<.001 The programme showed a secondary prevention effect on decreasing alcohol use at 6 months after the intervention. The effect was also marginally significant for alcohol use at the 1.5-year follow-up. The results of the logistic regression analysis indicated the secondary prevention effect diminished over time.

Study details	Intervention and population details	Analyses	Results
Johnson et al (1990) RCT (cluster) + **Objective:** To evaluate the effects of the MPP on high-risk youth **Setting:** School + community **Country:** USA **Funding source:** NR	**Intervention details** **Name**: Midwest Prevention Programme **Focus/aim**: Alcohol and drug use **Programme type**: multi-component **Theoretical base**: NR **Key components**: (1) school programme emphasizing drug resistance skills training with homework sessions, (2) parent organisation programme, (3) training of community leaders, and (4) mass media coverage **Providers/delivers**: **Length**: (1) 10 sessions **Duration**: NR **Intensity**: NR **Other details**: **Comparator**: Training of community leaders and mass media coverage **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1607 **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = NR **Mean age (range)**: NR **Ethnicity**: 76.6% White, 19.2% Black, 2% Hispanic and 1.2% Asian **Baseline drinking behaviours**:	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Multiple logistic regression **Unit of allocation:** Organisation/institution (16 schools) **Unit of analysis:** Individual **Time to follow-up**: 3 years **Other details:** Complete data available for 1105 (69%) of original sample. **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: No data presented **Attrition** **Number of participants completing study**: 84% assessed at baseline and 3-yr follow-up **Reasons for non-completion**: Drug users more likely to be lost to follow-up. No difference in attrition between groups.	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Students who used alcohol over a 30-day period* (intervention; control) 1984 (grade 6/7): 3.4%; 5.3% 1987 (grade 9/10): 33.8%; 32.6% *2 or more drinks in last 30 days Multiple logistic regression functions found no significant effects of the programme on alcohol use. There were 4 independent risk factors for alcohol use based on data collected in 1984: cigarette use, friends' alcohol use, parents' alcohol use and age.

Study details	Intervention and population details	Analyses	Results
Komro et al (1999) RCT (cluster) + **Objective:** Describe two major peer leadership components of the first phase of Project Northland, an alcohol prevention trial. **Setting:** School, **Country:** USA **Funding source:** National Institute on Alcohol Abuse and Alcoholism	**Intervention details** **Name**: Amazing Alternatives **Focus/aim**: Enhancing healthy decision-making, resistance training, clarifying norms, exploring influence and reasons for drinking. **Programme type**: Multi-component **Theoretical base**: Multi-component **Key components**: Peer and teacher led activities; discussions, class games and role plays and alcohol free activities **Providers/delivers**: Other, teachers, peers and community volunteers **Length**: NR **Duration**: NR **Intensity**: NR **Other details**: **Comparator**: NR. This article provided the results for the intervention group only **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1236 (24 schools) **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = 51% **Mean age (range)**: sixth grade **Ethnicity**: 93% white, 6% American Indian. **Baseline drinking behaviours**: Alcohol use tendency data collected at the beginning of the 6th grd (mean and se): 10.50, .47 (both types of peer leaders); 11.82, .36 (only elected peer leaders); 10.99, .38 (only volunteer peer leaders); 11.30, .17 (other students) p value 0.07. Group comparisons ns. Alcohol use tendency data collected at the end of 6th grd (mean and se): 10.67, .43 (both peer types); 12.24, .46 (only elected peer leaders); 11.62, .42 (only volunteer peer leaders); 11.84, .21 (other students).	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANCOVA **Unit of allocation:** Organisation/ institution **Unit of analysis:** Individual **Time to follow-up**: NR **Other details:** **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: **Attrition** **Number of participants completing study**: 965 (78%) **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Alcohol use tendency data collected at the beginning of 7th grd (mean and se): 12.20, .69 (both types of peer leaders); 15.70, .62 (only elected peers); 13.34, .57 (only volunteer peer leaders); 14.72, .29 (other students), p value 0.03. Comparison 2+3 p<0.01; 2+4 0.04. Alcohol use tendency data collected at the end of 8th grd (mean and se): 15.14, .91 (both types of peer leaders); 17.72, .73 (only elected peer leaders); 15.53, .78 (only volunteer leaders); 16.56, .34 (other students) p value 0.24. Group comparisons ns.

Study details	Intervention and population details	Analyses	Results
Komro et al (2008) RCT (Cluster) ++ **Objective:** Evaluation of Project Northland in Chicago **Setting:** School, community + family **Country:** USA **Funding source:** NIAAA	**Population details** **Inclusion**: Schools were selected for recruitment if they included grades 5–8, had mobility rates <25%, and had 30+ students per grade. **Exclusion**: NR **Total** n= 61 schools (4,259 students) **Intervention**, n= 29 schools (45.5%) **Comparator**, n= 32 schools (54.5%) **Male** n (%) = 50% **Mean age (range)**: Grade 5 students **Ethnicity**: 43% Black, 29 % Hispanic, 13% White, 15% other **Other baseline:** 47% lived with both parents, 74% reported English as primary language at home **Intervention details** **Name**: Project Northland **Focus/aim**: Reduce alcohol and other problematic behaviours **Programme type**: Multi-component **Theoretical base**: Theory of triadic influence, Perry's planning model for adolescent health promotion **Key components**: Peer-led classroom curricula; parental involvement and education, and other educational and school and community involvement activities; peer leadership and youth-planned community service projects; community organizing and environmental neighbourhood change **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: Three years; 6-10 peer led sessions per year; 4 home-based sessions per year. **Other details**: Teachers were trained by university-based	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Mixed-model ANOVA **Unit of allocation:** School units (grouped within neighbourhood) **Unit of analysis:** School unit **Time to follow-up**: Three follow-up surveys before and immediately following each of three intervention years (i.e. PT only) **Other details:** None **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: matched on ethnicity, poverty, mobility and reading and mathematics **Attrition** **Number of participants completing study**: first follow-up - 59 schools (4,240 students; 94%); second follow-up - 60 schools (3,778 students; 93%); third follow-up - 59 schools (3,802 students; 95%). **Reasons for non-completion**: Schools closing, students leaving study schools	**Knowledge and understanding** NR **Attitudes and values** Over the three follow-up periods, there were no statistically significant differences in the growth rate on the alcohol intentions scale, norms supportive of use, perceived outcomes of supportive use, lack of resistance self-efficacy, parental involvement or limited access to alcohol between the intervention and control groups. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** At baseline, the alcohol use scale was lower in the intervention group compared to the control group. Over the three follow-up periods, there were no statistically significant differences in the growth rate of the drug use, alcohol use between the intervention and control groups.

	project staff to implement the classroom curricula. **Comparator**: Education as normal.		

Study details	Intervention and population details	Analyses	Results
Perry et al (1996); **Komro et al (2001)** RCT (cluster) + **Objective:** To describe the initial outcomes of Project Northland after 3 years of intervention. **Setting:** School + other, Community and family **Country:** USA **Funding source:** National Institute on Alcohol Abuse and Alcoholism	**Intervention details** **Name**: Project Northland **Focus/aim**: Alcohol **Programme type**: Various, see other details **Theoretical base**: NR **Key components**: Parental involvement/educational curriculum; behavioural curricula; peer participation and community task force activities **Providers/delivers**: Other, Peers, teachers, adult volunteers **Length**: see other details **Duration**: see other details **Intensity**: see other details **Other details**: 6th grade: Slick Tracey Home Team programme, 4 sessions of activity story books completed as homework with parents over 4 consecutive weeks. Information for parents on young adolescent alcohol use included in each activity book. Also, small group discussions in school and a family fun night; 7th grade: The Amazing Alternatives! Programme. Consisted of (1) kickoff evening with parents; (2) 8-wk peer led classroom curriculum (peer and teacher led sessions including audiotape vignettes, group discussions, class games, problem solving, and role plays); (3) peer participation programme to create alcohol-free alternative activities; (4) home programme booklets mailed directly to parents; and (5) information for parents (as before); 8th grade: PowerLines. 8 session classroom curriculum; a theatre production, three information leaflets for parents, continuation of peer participation programme; Community-wide task forces activities	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Mixed model regression methods (ANOVA). **Unit of allocation:** Community (20 combined districts) **Unit of analysis:** Individual **Time to follow-up**: end of 6th, 7th and 8th grades **Other details:** Tendency to use alcohol scale combined items about intentions to use alcohol and items about actual alcohol use. **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: More intervention students reported alcohol use at baseline **Attrition** **Number of participants completing study**: 93%, 88% and 81% at end of 6th, 7th and 8th grades **Reasons for non-completion**: 231 (n=450) from intervention lost at end of 8th grade. No differences in	**Knowledge and understanding** NR **Attitudes and values** Students in the intervention district had significantly lower scores on the peer influence scale at the end of the 8th grade, however there were no significant differences between intervention and control communities on the self-efficacy or perceived access scales. Among baseline non-users, students in the intervention districts had significantly lower scores at the end of 8th grade on the peer influence scale, and greater self-efficacy to refuse alcohol, relative to students in control districts. No difference between intervention and control baseline users. **Personal and social skills** [Komro et al 2001 - data analysed on 1901 students surveyed at baseline and follow-up]: Among all students, statistically significant mediators of the tendency to use alcohol included parent-child alcohol-related communication items 1 and 4 ("My parents talk with me about problems drinking alcohol can cause young people" and "My parents have told me what would happen if I were caught drinking alcohol"), the Peer Influence Scale, the Functional Meaning Scale, and MMPI-A Proneness Scale. Among baseline nonusers (n=1176), significant mediators were parent-child alcohol-related communication items 1 and 4 (see above), the Peer Influence Scale, the Functional Meaning Scale, the MMPI-A School Problems Scale and the MMPI-A Proneness Scale **Health and social outcomes related to alcohol and sexual health** Tendency to use alcohol scale - mean (95% CI) (intervention; control) Baseline All students (n=2351): 11.5 (11.0, 12.0); 11.0 (10.5, 11.5) Baseline nonusers (n=1443): 9.4 (9.2, 9.5); 9.5 (9.3, 9.7) Baseline users (n=881): 14.5 (13.8, 15.2); 13.6 (12.9, 14.4)

	were also implemented over the 3 years of the programme. **Comparator**: Usual drug education. 90% D.A.R.E, 21% Project Quest **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 2351 **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = NR **Mean age (range)**: NR **Ethnicity**: 94% White, 5.5% 'Indian' **Baseline drinking behaviours**: See Results.	baseline alcohol use between lost to follow-up in the intervention and control group or between those lost and those who remained. Reasons included moving out of area, parent/student refusals, cross over, absent and inconsistent responding.	6th grade All students (n=2191): 11.7 (11.2, 12.2); 11.6 (11.1, 12.1) Baseline nonusers (n=1353): 10.1 (9.6, 10.6); 10.2 (9.7, 10.7) Baseline users (n=816): 14.3 (13.5, 15.1); 14.1 (13.2 14.9) 7th grade All students (n=2060): 14.5 (13.3, 15.7); 14.9 (3.7, 16.1) Baseline nonusers (n=1273): 12.2 (11.2, 13.2); 13.2 (12.2, 14.2) Baseline users (n=766): 18.3 (16.3, 20.3); 17.8 (15.8, 19.8) 8th grade All students (n=1901): 16.0 (15.1, 16.8)*; 17.5 (16.7, 18.5) Baseline nonusers (n=1176): 13.8 (13.1, 14.4)**; 15.3 (14.6, 15.9) Baseline users (n=712): 19.7 (18.0, 21.6); 21.1 (19.3, 22.9) *p<0.05; **p<0.01 (intervention vs. control) At the end of 8th grade, students in the intervention districts had significantly lower scores (p<0.05) on the Tendency to Use Alcohol scale than students in control districts. In addition, nonusers of alcohol at pre-test in the intervention communities reported lower scores than non-users in control communities at the end of 8th grade (p<0.01). There was no difference at any other follow-up. Past month alcohol use - % (95% CI) (intervention; control) Baseline All students: 6.9 (5.0, 8.8)*; 3.9 (2.0, 5.9) Baseline nonusers: 0; 0 Baseline users: 16.6 (12.7, 20.5)*; 10.6 (6.4, 14.9) 6th grade All students: 7.6 (4.9, 10.4); 6.3 (3.5, 9.0) Baseline nonusers: 2.4 (1.0, 3.7); 3.1 (1.7, 4.4) Baseline users: 15.6 (10.1, 21.1); 11.6 (5.9, 17.3) 7th grade All students: 14.9 (10.3, 19.4); 17.5 (13.0, 22.0) Baseline nonusers: 8.3 (5.1, 11.9); 11.8 (8.7, 15.3) Baseline users: 25.5 (17.1, 33.5); 27.9 (19.5, 36.4) 8th grade All students: 23.6 (20.1, 27.1)*; 29.2 (25.6, 32.8) Baseline nonusers: 15.3 (11.7, 18.9)*; 21.2 (17.7, 24.8)

			Baseline users: 36.9 (29.5, 44.2); 43.1 (35.2, 51.0) Past week alcohol use - % (95% CI) (intervention; control) Baseline All students: 3.8 (2.6, 5.0)*; 2.0 (1.0, 3.2) Baseline nonusers: 0; 0 Baseline users: 9.1 (6.3, 11.9); 5.3 (2.2, 8.4) 6th grade All students: 3.4 (1.4, 5.5); 3.4 (1.4; 5.4) Baseline nonusers: 1.0 (0, 2.2); 1.5 (0.4, 2.7) Baseline users: 7.1 (2.6, 11.7); 6.7 (2.1, 11.4) 7th grade All students: 7.4 (4.0, 10.8); 8.4 (5.1, 11.8) Baseline nonusers: 5.0 (2.5, 8.1); 6.1 (3.6, 9.0) Baseline users: 11.1 (5.4, 16.7); 13.2 (7.2, 19.0) 8th grade All students: 10.5 (8.0, 13.0)*; 14.8 (12.2, 17.4) Baseline nonusers: 5.3 (3.0, 7.6)**; 9.8 (7.5, 12.1) Baseline users: 18.4 (12.4, 24.5); 23.6 (17.0, 30.1) *p<0.05; **p<0.01 (marginally significant) (intervention vs. control) For all students, the percentages who reported alcohol use in the past month and past week were significantly lower in the intervention group at the end of 8th grade. For baseline nonusers, intervention students had significantly lower monthly and weekly alcohol use at the end of the 8th grade. The percentage of students who reported past year alcohol use were also significantly lower among baseline nonusers in the intervention districts at the end of the 7th grade [21.1% (SE 2.6%) vs.

Study details	Intervention and population details	Analyses	Results
Perry et al (2002) RCT (cluster) + **Objective:** To examine (1) the long term outcomes of Project Northland and (2) the effects of Phase 2 of Project Northland. (Phase II data extracted only, see #115 for Phase I) **Setting:** School + other, family and community **Country:** USA **Funding source:** National Institute on Alcohol Abuse and Alcoholism	**Intervention details** **Name**: Project Northland (Phase II) **Focus/aim**: Alcohol **Programme type**: multicomponent **Theoretical base**: NR **Key components**: Classroom curriculum (grade 11), 11 postcards ("behavioural tips") for parents, print media campaign, peer action teams, and community action teams (direct action community organising model) aimed at reducing commercial and social access to alcohol among high school students in their communities **Providers/delivers**: Other, Teachers, peers, external **Length**: 6 session classroom curriculum **Duration**: 1 school year **Intensity**: NR **Other details**: **Comparator**: School districts offered Phase I curricula in 94-97 and Class Action curriculum in 99-00 school year **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 2953 **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = 53% **Mean age (range)**: NR **Ethnicity**: 93% White, 5% American Indian **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Growth curve analyses **Unit of allocation:** Organisation/institution (20 schools) **Unit of analysis:** Individual **Time to follow-up**: End of grades 11 and 12 **Other details:** NR **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: **Attrition** **Number of participants completing study**: 84.6% in 98 to 92.9% in 92 **Reasons for non-completion**: parent/student refusal, absence from school, dropped out of school or moved. One school district dropped out during 96-97.	**Knowledge and understanding** NR **Attitudes and values** During Phase I, students in the intervention schools were significantly less likely to increase their perceptions of Peer Influence to use alcohol and their Perceived Access to alcohol. There were no differences in the trajectories of these scales in Phase II. During the interim phase, students in the intervention schools were significantly more likely to experience increased perceptions of Peer Influence to use alcohol and decrease their Self-Efficacy to refuse alcohol. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Tendency to use alcohol scale - mean (SE) (intervention; control) Phase I (1991-1994) Baseline score: 11.01 (0.26); 10.24 (0.26;) p=0.04 growth rate (mean change in the dependent measure, adjusted for race): 1.82 (0.12); 2.44 (0.12); p<0.01 Interim phase (1994-1996) Baseline score: 16.92 (0.56); 18.40 (0.55); p<0.01 growth rate: 3.40 (0.26); 2.37 (0.24); p<0.01 Phase 2 (1996-1998) Baseline score: 22.94 (0.65); 22.01 (0.60); p=0.05 growth rate: 1.44 (0.24); 2.11 (0.21); p=0.03 The score range was 8 (low tendency) to 48 (high tendency) Past month alcohol use - mean (SE) (intervention; control) Phase I (1991-1994) Baseline score: 1.07 (0.02); 0.99 (0.02); p<0.01 growth rate: 0.11 (0.01); 0.16 (0.01); p<0.01 Interim phase (1994-1996) Baseline score: 1.41 (0.04); 1.55 (0.04); p<0.01

			growth rate: 0.31 (0.04); 0.18 (0.03); p<0.01 Phase 2 (1996-1998) Baseline score: 1.96 (0.07); 1.83 (0.07); p=0.08 growth rate: 0.13 (0.03); 0.20 (0.03); p=0.07 *The score range was 1 (0 occasions) to 7 (40 or more occasions) Past week alcohol use - mean (SE) (intervention; control) Phase I (1991-1994) Baseline score: 1.03 (0.01); 1.00 (0.01); p=0.13 growth rate: 0.05 (0.01); 0.07 (0.01); p=0.12 Interim phase (1994-1996) Baseline score: 1.19 (0.03); 1.23 (0.03); p=0.37 growth rate: 0.12 (0.02); 0.06 (0.02); p=0.37 Phase 2 (1996-1998) Baseline score: 1.39 (0.04); 1.33 (0.03); p=0.49 growth rate: 0.07 (0.02); 0.10 (0.02); p=0.53 *The score range was 1 (0 occasions) to 7 (40 or more occasions) Binge drinking (5 or more drinking in a row in the past 3 wks) - mean (SE) (intervention; control) Phase I (1991-1994) Baseline score: 1.05 (0.01); 1.01 (0.01); p<0.01 growth rate: 0.05 (0.01); 0.08 (0.01); p<0.01 Interim phase (1994-1996) Baseline score: 1.22 (0.05); 1.31 (0.05); p=0.04 growth rate: 0.23 (0.03); 0.11 (0.03); p=0.04 Phase 2 (1996-1998) Baseline score: 1.60 (0.06); 1.45 (0.05); p=0.02 growth rate: 0.09 (0.03); 0.18 (0.02); p=0.02 **The score range was 1 (0 occasions) to 6 (10 or more occasions) Students in the intervention schools were significantly less likely than students in the control schools to increase their Tendency to Use Alcohol, past month alcohol and binge drinking during Phase I. Students in the intervention schools were also significantly less likely to increase their Tendency to Use Alcohol and binge drinking during Phase 2. No difference on

			other measures, though students were marginally less likely to increase past month alcohol use ($p<0.07$). During the interim phase, students in the intervention schools were significantly more likely than control students to increase their alcohol use on all measures.

Study details	Intervention and population details	Analyses	Results
Toomey et al (1996) RCT (cluster) + **Objective:** Evaluation of Amazing Alternatives! Home Programme for Parents of 7th Graders **Setting:** School + home **Country:** USA **Funding source:** NIAAA	**Intervention details** **Name**: Amazing Alternatives **Focus/aim**: To increase parental rules and discussions about alcohol **Programme type**: Skills and knowledge training **Theoretical base**: NR **Key components**: Information booklet and discussion exercises **Providers/delivers**: Other, Parents **Length**: 4 booklets **Duration**: Winter **Intensity**: NR **Other details**: **Comparator**: No intervention **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1028 **Intervention**, n= 521 (50.7) **Comparator**, n= 507 (49.3) **Male** n (%) = 51% **Mean age (range)**: NR **Ethnicity**: 95% white **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANCOVA **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: Baseline 2 (Spring 1992), Follow up one (Spring 1993) and follow up 2 (Spring 1994) **Other details:** **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: **Attrition** **Number of participants completing study**: 83.1% **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** No significant effect on any measure of alcohol use (control, treatment follow up 1; follow up 2) Lifetime alcohol 0.60, 0.56; 0.61, 0.61 Past year use 0.37, 0.34; 0.43, 0.43 Past month use 0.12, 0.12; 0.12, 0.09

Study details	Intervention and population details	Analyses	Results
Williams et al (1995) RCT (cluster) + **Objective:** To describe the 6th grade home-based intervention, the Slick Tracey Home Team. **Setting:** School + Home **Country:** USA **Funding source:** NIAAA	**Intervention details** **Name**: Slick Tracey Home Team Programme (Project Northland) **Focus/aim**: Alcohol **Programme type**: NR **Theoretical base**: NR **Key components**: activity booklets, small group activities, homework (completion of activity books with parents), parent education, evening poster fair **Providers/delivers**: Teachers, peers **Length**: 4 sessions **Duration**: NR **Intensity**: NR **Other details**: After completion of the booklets, sixth graders worked on projects in the classroom that addressed a variety of alcohol-related issues. These projects were designed to integrate the knowledge they gained from the booklets. The small group projects included factual information about alcohol use, its consequences, and effects on the body; advertising and other mass media promotion of use; and prevention strategies. Teachers were trained in 4 hour sessions. Peer leaders trained in 2 hour sessions. Students received incentives for completing the booklets. **Comparator**: NR **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n=2141 **Intervention**, n= 1236 (n=1118) **Comparator**, n= 1115 (n=1023) **Male** n (%) = NR **Mean age (range)**: 11.8 yrs **Ethnicity**: Majority White, 5.5% Native American **Baseline drinking behaviours**: Alcohol use % (95% CI) (intervention; control) Lifetime: 39.6 (35.2, 44.3); 34.3 (30.1, 38.8); Year: 19.3 (15.8, 23.4); 15.9 (12.8, 19.6); Month: 6.3 (4.6, 8.7); 3.5 (2.3, 5.1)*; Week: 3.6 (2.5, 5.1); 2.0 (1.3, 3.2)*l Been drunk: 4.3 (3.0, 6.0); 3.8 (2.6,; 5+ drinks in last 2 weeks: 4.4 (3.0, 6.3); 2.7 (1.7, 4.2) *p<0.05	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Mixed model regression methods **Unit of allocation:** Community (20 school districts) **Unit of analysis:** Individual **Time to follow-up**: PT **Other details:** Analyses performed on n=2195 students. Excluded from analyses if failed to respond to an item or had 3 or more 'exaggerated' responses. Analyses took account of clustering. **Baseline comparability** **Groups balanced at baseline:** No/NR **Comments**: Intervention group slightly older with more Native American participants **Attrition** **Number of participants completing study**: 2201 (93.6%) **Reasons for non-completion**:	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Alcohol use % (95% CI) at posttest (end of 6th grade) Lifetime: 38.9 (34.2,43.8); 38.5 (33,8, 43.4) Year: 18.0 (14.0, 22.8); 15.7 (12.1, 20.2) Month: 6.0 (3.9, 9.3); 4.9 (2.1, 7.8) Week: 2.8 (1.7, 4.6); 2.6 (1.6, 4.4) Been drunk: 3.6 (2.4, 5.2); 3.6 (2.4, 5.2) 5+ drinks in last 2 weeks: 1.8 (1.1, 3.0); 2.5 (1.5, 4.0) Using the school district as the unit of analysis and controlling for baseline differences, differences between intervention and reference groups in terms of alcohol use were not significant at the end of sixth grade.

Alcohol: peer-support and counselling programmes

Study details	Intervention and population details	Analyses	Results
Bremberg and Arborelius (1994) CBA - **Objective:** To examine the effects on adolescent alcohol consumption of a school-based student centred health counselling programme. **Setting:** School **Country:** Sweden **Funding source:** Swedish Council for Planning and Co-ordination of Research	**Intervention details** **Name**: "It's your decision!" **Focus/aim**: Reduce alcohol use and associated problems **Programme type**: Social skills training **Theoretical base**: coping behaviour, self-efficacy, social modelling **Key components**: Group discussions and individual counselling **Providers/delivers**: Health counsellor (either a teacher, school social worker or a school nurse). **Length**: Six sessions (3 individual, 3 group) **Duration**: One hour **Intensity**: Two months **Other details**: **Comparator**: Control **Population details** **Inclusion**: Voluntary participation **Exclusion**: NR **Total** n= 124 students **Intervention**, n= 65 **Comparator**, n= 59 **Male** n=22 (intervention) **Mean age (range)**: 15-16 years **Ethnicity**: NR **Baseline drinking behaviours**: See primary outcomes	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: ANOVA **Unit of allocation:** Not applicable **Unit of analysis:** Individual **Time to follow-up**: 4 months (PT) and 6 months from baseline **Other details:** None **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: Demographic data not supplied **Attrition** **Number of participants completing study**: 4 months: n=59 intervention students and n= 59 control students; 6 months: n=52 intervention students and n=56 control students **Reasons for non-completion**: Not turning up for session, forgotten codes and failure to return questionnaires.	**Knowledge and understanding** NR **Attitudes and values** There was no difference between intervention and control students in terms of problems they perceived to be related to alcohol use. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** No statistically significant differences between intervention and control students at either follow-up in terms of consumption of alcohol. Consumption of alcohol – mean (SD) (intervention; control) Alcohol consumed last week: Pre-test: 1.86 (3.20); 1.72 (3.41) Post-test: 8.87 (10.16); 6.06 (7.84). Frequency of wine/spirits/beer last 3 months, score 2-54). Pre-test: 33.79 (17.63); 35.40 (14.61) Post-test: 32.07 (16.54); 33.05 (15.57) Follow up test: 33.86 (17.25); 37.04 (14.64) Frequency of getting drunk, score (1-5). Pre-test: 2.05 (1.07); 2.05 (1.12) Post-test: 2.12 (1.11); 2.05 (1.05) Follow up test: 2.20 (1.06); 2.02 (1.06)

Study details	Intervention and population details	Analyses	Results
Colnes (2000) RCT (Individual) + **Objective:** To reduce substance use through the Super Leaders Program **Setting:** School **Country:** USA **Funding source:** NR	**Intervention details** **Name**: Super Leaders Program **Focus/aim**: To evaluate the Super Leaders Program **Programme type**: Social skills training **Theoretical base**: Social skills training **Key components**: Training retreats, after school leadership program and activities **Providers/delivers**: Peer led, **Length**: 4 day residential training **Duration**: NR **Intensity**: NR **Other details**: None **Comparator**: No intervention **Population details** **Inclusion**: **Exclusion**: **Total** n= 76 students **Intervention**, n= 38 **Comparator**, n= 38 **Male** n = 31 (40.8%) **Mean age (range)**: 15.36 years (SD 0.72: range 14-17) **Ethnicity**: n=41 African Americans (54%), n=34 Whites (45%) and n=1 Asian (1%). **Baseline drinking behaviours**: Frequency of alcohol use: intervention, mean 1.16 (SD 0.37); control, mean 1.24 (SD 0.43.) Getting drunk: intervention, mean 1.00 (SD 0.0); control, mean 1.00 (SD 0.0)	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: General linear models of analysis of variance (ANOVA). **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: 4 months later **Other details:** None **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: More females, participants not spread evenly across schools **Attrition** **Number of participants completing study**: n= 10 students lost to follow-up **Reasons for non-completion**: Interfered with another activity. Two students stated that the survey was too long.	**Knowledge and understanding** NR **Attitudes and values** Attitudes towards substance: m 1.28, sd .50 (pre-test) and m 1.21, sd .31. Control m 1.21, sd .40 (pre-test) and m 1.24, sd .52 (post-test). F test=.06 and p value=.80. Means for both intervention and control groups at pre and post test ranged from 1.1 to 1.1 (possible range of 1-5) indicating both groups at both times had negative attitudes towards substance use. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Frequency of use: m 1..16, sd .37 (pre-test) and m 1.03, sd .16 (post-test) and control m 1.21, sd .41 (pre-test) and m 1.13, sd .34 (post-test). No significant change. Means for both treatment and control groups at pre and post test ranged from 1.0 to 1.3 (possible range of 1-9) indicating both groups at both times were abstinent from alcohol.

Study details	Intervention and population details	Analyses	Results
Padget et al (2005) NRCT + **Objective:** Evaluation of cross age peer support prevention programme **Setting:** School **Country:** USA **Funding source:** Mothers Against Drink Driving	**Intervention details** **Name**: Protecting You/Protecting Me (PY/PM) **Focus/aim**: Reduce intentions and actual use **Programme type**: Peer support **Theoretical base**: NR **Key components**: Teaching children about their brains; vehicle safety; life skills **Providers/delivers**: Peer led (high school students) **Length**: 8 lessons 5 years **Duration**: 1 hour **Intensity**: 1 lesson/week for 8 weeks each year **Other details**: Teachers selected PAL peer helper students to teach PY/PM. Peer helper teachers attended a 3-day training course. **Comparator**: PAL **Population details** **Inclusion**: Students enrolled in the PAL Peer Assistance and Leadership programme **Exclusion**: NR **Total** n= 401 **Intervention**, n= 218 (54.4%) **Comparator**, n= 183 (45.6%) **Male** n (%) = 24-35% **Mean age (range)**: High school students **Ethnicity**: 20-6% African American; 12-12% Hispanic; 56-77% white; 12-4% other **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Hierarchical Linear and Non-Linear Modelling, converted to effect sizes **Unit of allocation:** Organisation/ institution (schools) **Unit of analysis:** Individual **Time to follow-up**: Post test **Other details:** None **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: No details reported **Attrition** **Number of participants completing study**: n=188 intervention students (14%) and n=141 comparison students (23%) **Reasons for non-completion**: Significantly more students were lost to follow-up from the comparison group.	**Knowledge and understanding** There was no difference between intervention and control students on knowledge measures. Mean difference score (control; treatment) Effects of alcohol use = 0.02; 0.25, p < 0.001 Risks of high levels of alcohol use = -0.09; 0.04, p < 0.05 Risks of low levels of alcohol use - 1-2 drinks = 0.02; 0.26, NS; 1-2 drinks per month = -0.02; 0.15, NS Sources of alcohol = 0.06; 0.04, NS **Attitudes and values** Students who taught the PY/PM demonstrated more positive changes in attitudes about the effects of alcohol use (p<0.001) and the risks of high levels of alcohol use (p<0.05). There was no difference between intervention and control students on other attitude measures. Mean difference score (control; treatment) Attitudes Future intentions toward alcohol use = -0.16; 0.02, NS Risks of high levels of alcohol use = -0.09; 0.04, p < 0.05 Risks of low levels of alcohol use - 1-2 drinks = 0.02; 0.26, NS; 1-2 drinks per month = -0.02; 0.15, NS Self efficacy = 0.11; 0.04, NS **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Students who taught the PY/PM programme reported lower levels of binge drinking at posttest relative to control students (p<0.05). There was no significant difference in the number of students reporting recent alcohol use. (% Treatment; control) Recent alcohol use = 20; 32, NS; Binge drinking = 4; 15, p < 0.05 There was no evidence that the programme affected changes in riding with impaired drivers or driving after drinking.

			(% Treatment, control) Riding with an impaired driver = 7; 13, NS; Driving after drinking = 6; 10, NS

Study details	Intervention and population details	Analyses	Results
Valentine et al (1998) NRCT - **Objective:** Evaluation of Urban Youth Connection Programme in Middle and High School Students **Setting:** School **Country:** USA **Funding source:** CSAP	**Intervention details** **Name**: Urban Youth Connection Programme **Focus/aim**: **Programme type**: Counselling **Theoretical base**: **Key components**: Individual, paired or group counselling **Providers/delivers**: External, Educational psychology students **Length**: Mean 7.8 months **Duration**: NR **Intensity**: Mean 8.3 sessions **Other details**: **Comparator**: **Population details** **Inclusion**: Teacher rated academic risk, behavioural problems, other identified mental health or behavioural concerns **Exclusion**: NR **Total** n= 336 **Intervention**, n= 187 (55.7%) **Comparator**, n= 149 (44.3%) **Male** n (%) = 252 (75%) **Mean age (range)**: middle school 13 years; high school 15 years **Ethnicity**: 19-42% African American; 3-4% Asian; 37-66% Hispanic; 3-8% White; 9-17% other **Baseline drinking behaviours**: NR Middle school (trt, control %) 30 day Hard liquor 5.4, 4.6, ns; Beer 40.8, 19.7,p < 0.01; Wine 31.2, 27.5, ns; Wine cooler 31.2, 20.8, ns High school (trt, control %) 30 day	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Logistic regression **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: Post test **Other details:** None **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Differences in ethnicity, 30-day use of beer and hard liquor. **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Alcohol use in last 30 days Middle School (% Trt; control) liquor 9.6; 11.3, NS beer 40.5; 32.6, NS wine 28.4; 32.1, NS wine cooler 33.8; 27.8, NS High School (% Trt; control) liquor 38.9; 21.5, p < 0.01 beer 53.2; 38.3, p < 0.01 wine 38.9; 25.3, p < 0.01 wine cooler 30.6; 32.3, NS Adjusted OR (any; low; high programme exposure vs. none) Middle School liquor 1.0; 0.9; 1.3 beer 0.8; 1.5; 0.2* wine 0.6; 0.8; 0.4, wine cooler 0.8; 0.7; 1.0 High school liquor 1.6; 1.6; 1.7 beer 1.3; 1.2; 1.6 wine 2.7*; 3.0*; 2.2 wine cooler 0.8; 1.0; 0.5 *p<0.05

	Hard liquor 33.6, 19.3, p0.003; Beer 51.9, 38.9, p < 0.05; Wine 34.6, 29.2, ns; Wine cooler 35.2, 31.0, ns		

Study details	Intervention and population details	Analyses	Results
Webster et al (2002) NRCT + **Objective:** To assess the effectiveness of a peer support programme to influence students' knowledge positively and attitudes and use of (drugs) alcohol. **Setting:** School **Country:** Australia **Funding source:** University of Newcastle, Australia	**Intervention details** **Name**: Peer support programme **Focus/aim**: -To provide security and friendship to allow adaptation -To provide good peer support to enhance individual development - To develop communications and leadership skills **Programme type**: Normative education **Theoretical base**: Peer-led confidence and individuality development **Key components**: Games, exercise, discussion and role play. **Providers/delivers**: Peer led **Length**: **Duration**: 45 minutes **Intensity**: 10-16 sessions **Other details**: **Comparator**: **Population details** **Inclusion**: **Exclusion**: **Total** n= 428 **Intervention**, n= 235 **Comparator**, n= 193 **Male** n (%) = 143 (33.4%) (at follow-up) **Mean age (range)**: 12 years **Ethnicity**: **Baseline drinking behaviours**: Baseline questionnaire assessed knowledge of and attitudes to alcohol measured on 5-point scale.	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: ANOVA and 2-way ANCOVA and, following first findings, a multiple regression analysis to assess pathway significance of internalised and dependent variables **Unit of allocation:** Group (School characteristics - matched) **Unit of analysis:** Group **Time to follow-up**: Baseline measurement and then at months 3 and 6 **Other details:** **Baseline comparability** **Groups balanced at baseline**: No **Comments**: Intervention arm had significantly higher professional mothers and intact families. **Attrition** **Number of participants completing study**: 169 int arm (71.9%) and 157 control arm (81.3%) **Reasons for non-completion**: Conflicting engagements (e.g. sports), school absences and timetable clashes	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Over the 6 months of follow-up, participants showed an increase in enjoyment and use of alcohol in both groups. No difference in pattern of change between groups.

SRE: UK programmes

Study details	Intervention and population details	Analyses	Results
Bellingham & Gillies (1993) RCT (Individual) + **Objective:** Evaluation of AIDS education intervention for young adults **Setting:** Youth Training Centre **Country:** UK **Funding source:** Nottingham Health Authority	**Population details** **Inclusion**: Young people aged 16 years or older attending youth training centres **Exclusion**: NR **Total** n= 337 **Intervention**, n= 173 **Comparator**, n= 164 **Male** n (%) = NR **Mean age (range)**: 16-19 yrs **Ethnicity**: NR **Other baseline:** **Intervention details** **Name**: Streetwize comic **Focus/aim**: To provide relevant information about HIV transmission for young people. **Programme type**: AIDS education **Theoretical base**: NR **Key components**: Basic information about HIV, AIDS, body fluids and transmission, sex and risk, sexual relationships, and social and sexual behaviour and attitudes. **Providers/delivers**: Other **Length, duration**, i**ntensity**: One off comic session **Other details**: **Comparator**: No intervention	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Unpaired t-test **Unit of allocation:** Training centre **Unit of analysis:** Individual **Time to follow-up**: 2 weeks **Other details:** NR **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: Demographic data not presented. **Attrition** **Number of participants completing study**: 70% intervention, 73% control **Reasons for non-completion**: Illness, work experience at follow up	**Knowledge and understanding** Significantly higher level of mean HIV/AIDS knowledge in the intervention group compared to the control group at post test (mean [SD]: Intervention 27.40 [5.11] vs. Control 25.53 [4.58]; $p < 0.001$). **Attitudes and values** No statistically significant changes in HIV/AIDS attitudes between groups. No change or significant differences in behavioural intentions between the intervention and control groups to use a condom during the next sexual episode (Intervention 77% vs. Control 89%; NS). **Personal and social skills** Non significant increase in the number of intervention group participants who reported talking to their partner about HIV compared to the control group (Intervention 42% vs. Control 36%; NS). **Health and social outcomes related to alcohol and sexual health** No significant differences in the number of sexual partners between intervention and control groups (Intervention 69% vs. Control 68%; NS). No significant difference in the use of condoms at the last episode between the intervention and control group (Intervention 58% vs. Control 70%; NS).

Study details	Intervention and population details	Analyses	Results
Denman et al (1995) CBA - **Objective:** To examined the impact of a theatre in HIV and AIDS education programme **Setting:** School **Country:** UK **Funding source:** Nottingham and North Nottinghamshire District Health Authorities	**Population details** **Inclusion**: **Exclusion**: **Total** n= 12 schools **Intervention**, n= 276 **Comparator**, n= 531 **Male** n (%) = NR **Mean age (range)**: 13-14 yrs **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: Theatre in HIV and AIDS education **Focus/aim**: HIV/AIDS prevention **Programme type**: Theatre in Education **Theoretical base**: NR **Key components**: Theatre performance and workshop **Providers/delivers**: External **Length, duration**, **intensity**: 30 min play; 1 1/2 hr workshop **Other details**: **Comparator**: Did not view the performance or take part in the workshop	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: **Unit of allocation:** **Unit of analysis:** **Time to follow-up**: PT (1 day after the programme) **Other details:** **Baseline comparability** **Groups balanced at baseline:** **Comments**: NR **Attrition** **Number of participants completing study** Intervention: 252 (91%) Control: 428 (81%) **Reasons for non-completion**: Absenteeism	**Knowledge and understanding** A higher percentage of the experimental group changed their pre-test answer compared with the control group ($p<0.0005$). **Attitudes and values** NR **Personal and social skills** Shifts in attitude were observed at post-test for both the experimental and control groups; however, on 3 out of 10 statements the intervention group were more likely to change their answer in the expected or desired direction (all $p<0.05$). **Health and social outcomes related to alcohol and sexual health** NR

Study details	Intervention and population details	Analyses	Results
Gillies et al (1990) CBA - **Objective:** To evaluate the impact of an AIDS education comic on the knowledge, attitudes and behavioural intentions of 14 year old school pupils. **Setting:** School **Country:** UK **Funding source:** Nottingham Health Authority	**Population details** **Inclusion**: **Exclusion**: **Total** n= 284 pupils **Intervention**, n= 122 **Comparator**, n= 162 **Male** n (%) = 53% **Mean age (range)**: 14 years **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: Streetwize UK **Focus/aim**: HIV prevention **Programme type**: HIV prevention **Theoretical base**: NR **Key components**: **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: NR **Other details**: **Comparator**: No intervention	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Chi-squared **Unit of allocation:** **Unit of analysis:** Individual **Time to follow-up**: PT (2 weeks after intervention) **Other details:** **Baseline comparability** **Groups balanced at baseline:** True **Comments**: **Attrition** **Number of participants completing study** Intervention: n= 106 (87%) Control: n= 121 (75%) **Reasons for non-completion**: NR	**Knowledge and understanding** Mean level of knowledge was higher in students who had read and discussed the comics than in the control group (mean [SD] 37.8 [5.2] vs. 33.3 [6.6] p<0.001). **Attitudes and values** Few changes in attitudes and beliefs as a result of the intervention. However, significantly more intervention students believed that having only one faithful sexual partner could offer protection against HIV transmission (90% vs. 73%; p<0.01). There was no difference between groups in their stated intention to use condoms when sexually active. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** NR

Study details	Intervention and population details	Analyses	Results
Graham et al (2002) RCT (Cluster) ++ **Objective:** To assess the effectiveness of a teacher led intervention to improve teenagers' knowledge about emergency contraception. **Setting:** School **Country:** UK **Funding source:** NHS R&D S&W Studentship; Royal College of General Practitioners' Scientific Foundation Board; National Assembly for Wales	**Population details** **Inclusion**: **Exclusion**: **Total** n= 24 schools; 3,234 pupils **Intervention**, n= 12 schools; 1,552 pupils **Comparator**, n= 12 schools; 1,682 pupils **Male** n (%) = 52% **Mean age (range)**: Year 10 **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: NR **Focus/aim**: Knowledge of emergency contraception **Programme type**: Teacher training **Theoretical base**: NR **Key components**: In-service training for teachers to improve knowledge about emergency contraception and to develop skills for use in a lesson for year 10 pupils **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: Two hours **Other details**: **Comparator**: No training	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Regression analysis **Unit of allocation:** School **Unit of analysis:** Organisation/institution **Time to follow-up**: 6 months **Other details:** **Baseline comparability** **Groups balanced at baseline:** False **Comments**: **Attrition** **Number of participants completing study**: Intervention 84%; Control 79%* **Reasons for non-completion**: NR *% of eligible population	**Knowledge and understanding** Proportion of pupils in the intervention group who knew the correct time limit was significantly higher than the proportion in the control group [boys: 15.9%; 95% CI 6.5% to 25.3%; P < 0.01 / girls 20.4%; 95% CI 10.4% to 30.4%; P < 0.01). Intervention remained effective when pupils lost to follow up where included in the analysis. The NNT was 6.29 for boys and 4.90 for girls. Proportion of pupils knowing the correct time limit for use of the intrauterine device as emergency contraception was significantly higher in the intervention group than in the control group (boys: 4.2%; 95% CI 0.7% to 7.7%, P=0.02 / girls: 10.7%; 95% CI 0.4% to 21.0%, P=0.04) **Attitudes and values** There was no difference between the groups in the proportion of pupils intending to use emergency contraception in the future (boys 83.1% vs. 83.7%; girls 87.6% vs. 86.9%). (NB: Question not asked at baseline) **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** There was no difference in the number of pupils who reported they were not virgins at follow-up (boys: -0.3; 95% CI -6.2, 5.6; p=0.9 / girls: 0.8; 95% CI -7.2, 8.7; p=0.8) or in the number of pupils who reported they had used emergency contraception (boys: -0.1; 95% CI -8.9, 8.7; p=1.0 / girls: -8.0; 95% CI -20.8, 4.7; p=0.2)

Study details	Intervention and population details	Analyses	Results
Henderson et al (2006) RCT (Cluster) ++ **Objective:** To assess the impact of a theoretically based sex education programme (SHARE) delivered by teachers compared with conventional education in terms of conceptions and terminations registered by the NHS. **Setting:** School **Country:** UK **Funding source:** UK Medical Research Council, Health Education Board for Scotland.	**Population details** **Inclusion**: Pupils at non-Catholic state schools in Tayside and Lothian regions **Exclusion**: NR **Total** n= 4215 females **Intervention**, n= 2080 females **Comparator**, n= 2135 females **Male** n (%) = 100% female **Mean age (range)**: 13-14 yrs **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: Sexual Health and Relationships: Safe, Happy and Responsible (SHARE) See Wight et al (2002) for further intervention details.	**Process details** **Data collection method(s)**: NHS recorded conceptions for 4.5 year follow up **Statistical method(s) used to analyse data**: Model based analyses of the two binary outcomes. **Unit of allocation:** School **Unit of analysis:** School **Time to follow-up**: 4.5 years **Other details:** Analyses took account of intraclass correlations **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: see Wight et al (2002) **Attrition** **Number of participants completing study** Intervention: 2071 (99.6%) Control: 2125 (99.5%) **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** SHARE pupils had slightly higher rates of conceptions and terminations than controls at 4.5 years, but the difference between intervention and control groups was not significant. Adjusted difference (95% CI)* Termination rate per 1000: 15.7 (-10.7 - 42.1) Conception rate per 1000: 31.9 (-16.1 - 79.9) * Adjusted for school socioeconomic measure and leaver/social class measure.

Study details	Intervention and population details	Analyses	Results
Magnusson et al (2004) NRCT - **Objective:** To gauge the effect of giving information to 13 to 14-year-olds about family planning, general practice and school-based sexual health services during school lessons delivered by health professionals. **Setting:** School **Country:** UK **Funding source:** NHS Executive Eastern region	**Population details** **Inclusion**: **Exclusion**: **Total** n= 589 **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = 50% **Mean age (range)**: 13-14 years **Ethnicity**: 83% White, others not stated **Other baseline:** NR **Intervention details** **Name**: NR **Focus/aim**: NR **Programme type**: Promotion of contraceptive services to teenagers **Theoretical base**: NR **Key components**: Lesson delivered by the relevant health professional. Covered issues such as service location, opening hours, services provided and the policy on confidentiality **Providers/delivers**: Other **Length, duration**, i**ntensity**: Single lesson **Other details**: **Comparator**: Usual sex education but with no specific promotion of services.	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: NR **Unit of allocation:** School **Unit of analysis:** Not clear **Time to follow-up**: up to 6 months (not reported) **Other details:** Feasibility study **Baseline comparability** **Groups balanced at baseline:** False **Comments**: NR **Attrition** **Number of participants completing study**: 512 (87%) **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** Awareness of services was similar in intervention and control groups at baseline but had increased more dramatically in the intervention groups at follow-up. In the family planning group, proportion of young people who reported knowing where to find a local contraceptive clinic increased from 33% to 68% compared to no change in the control group. In the general practice group, the proportion of young people who said they knew of a GP that would provide contraception to young people aged below 16 years increased from 7% at baseline to 25% at follow-up, compared to 14% in the control group (9% at baseline). In the school nurse group, awareness of the drop-in clinic increased from 11% to 53%, there was also an increase in the control group (from 17% to 42%). **Health and social outcomes related to alcohol and sexual health** No significant changes were detected in use of contraception between intervention and control groups.

Study details	Intervention and population details	Analyses	Results
Mellanby et al (1995) CBA + **Objective:** Evaluation of school based sex education programme **Setting:** Secondary Schools **Country:** UK **Funding source:** SW Regional Health authority	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 6,573* **Intervention**, n= 1,175* (17.9) **Comparator**, n= 5,398* (82.1) **Male** n (%) = 3,366* (51.2) **Mean age (range)**: 15-16 yrs **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: A PAUSE programme **Focus/aim**: Decrease in sexual activity **Programme type**: Sex education **Theoretical base**: NR **Key components**: Lessons covered puberty, contraception, reproductive health, assertiveness training, and negotiation in relationships. **Providers/delivers**: Doctor, senior teacher and peer leaders **Length, duration**, i**ntensity**: 25-30 one hour lessons over three years (years 9 and 10) **Other details**: NA **Comparator**: Education as normal *Refers to the cumulative number of students over the three years of data collection	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Relative risk, chi squared for trend, logistic regression **Unit of allocation:** School **Unit of analysis:** Individual **Time to follow-up**: 3 years of data presented (for 1992, 1993 and 1994) **Other details:** **Baseline comparability** **Groups balanced at baseline:** **Comments**: **Attrition** **Number of participants completing study**: NA, cross-sectional **Reasons for non-completion**: NA	**Knowledge and understanding** Significantly higher sexual health knowledge among intervention students compared to controls (RR 1.47; 95% CI 1.37, 1.59). Significant increase in accurate normative knowledge on sex prevalence (p< 0.001) **Attitudes and values** In 1994, a greater proportion of students from intervention schools disagreed with six statements suggesting that sexual intercourse was beneficial to teenagers and their relationships. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Students in the control group were significantly more likely to have had sexual intercourse than students in the intervention group (1994: OR 1.45; 95% CI 1.13, 1.87). Findings also expressed as RR for intervention students vs. local (RR 0.80; 95% CI 0.69, 0.92) and distant controls (RR 0.88; 95% CI 0.78, 0.99).

Study details	Intervention and population details	Analyses	Results
Mellanby et al (2001) CBA + **Objective:** To describe a comparative investigation of peer- and adult-led sex education in National Curriculum Year 9 pupils. **Setting:** School **Country:** UK **Funding source:** North and East Devon Health Authority	**Population details** **Inclusion**: **Exclusion**: **Total** n= 1,675 students **Intervention**, n= peer 1,064 **Comparator**, n= adult 611 **Male** n (%) = **Mean age (range)**: Year 9 **Ethnicity**: **Other baseline:** **Intervention details** **Name**: A PAUSE programme **Focus/aim**: see Mellanby et al (1995) **Programme type**: see Mellanby et al (1995) **Theoretical base**: Social Learning Theory **Key components**: see Mellanby et al (1995) **Providers/delivers**: Other **Length, duration**, i**ntensity**: 10 sessions **Other details**: Teacher and nurse; peers **Comparator**: Peer vs. adult led sessions	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Mantel-Haenszel summary estimate; pooled within schools regression coefficient **Unit of allocation:** School **Unit of analysis:** Organisation/institution **Time to follow-up**: PT; 1 week after final session **Other details:** **Baseline comparability** **Groups balanced at baseline:** False **Comments**: **Attrition** **Number of participants completing study**: peer 859 (81%); adult 461 (76%) **Reasons for non-completion**:	**Knowledge and understanding** Test of knowledge and normative values: Only one question relating to perceived prevalence of sexual intercourse was significantly different between groups; students who had received the peer-led intervention were more likely to report the correct answer at PT (difference in proportions [DP] 16.9%; 95% CI 11.6, 22.3; p<0.001). Knowledge of STDs: Increase in knowledge was greater for students in the adult-led intervention (adjusted mean difference 0.5; 95% CI 0.4, 0.7; p<0.001). **Attitudes and values** At PT, adult-led group were more likely to continue to give responses indicating the beneficial effects of sexual intercourse (adjusted mean difference 0.2; 95% CI 0.01, 0.3; p=0.035). Adult-led group were more likely to agree that girls get a bad reputation if they have sex (adjusted DP 8.2%; 95% CI 2.9, 13.6; p=0.003) and less likely to answer that boys get a bad reputation if they have sex (adjusted DP 6.2%; 95% CI 2.1, 10.4; p=0.004). **Personal and social skills** No difference between the peer- and adult-led intervention group in terms of identification of assertiveness skill techniques. **Health and social outcomes related to alcohol and sexual health** NR

Study details	Intervention and population details	Analyses	Results
Stephenson et al (2004; 2008) RCT (Cluster) ++ **Objective:** To examine the effectiveness of peer-led compared to teacher-led sex education **Setting:** School **Country:** UK **Funding source:** Medical Research Council	**Population details** **Inclusion**: Year 9 pupils in comprehensive and non-selective schools in central and southern England **Exclusion**: NR **Total** n= 8766 pupils **Intervention**, n= 4516 (52%) **Comparator**, n= 4250 (48%) **Male** n (%) = 4248 (48%) **Mean age (range)**: 13-14 years (mean 13.7 years) **Ethnicity**: 84% White **Other baseline:** 6.7% of pupils had had sexual intercourse **Intervention details** **Name**: RIPPLE **Focus/aim**: Improving skills in sexual communication, condom use, knowledge about pregnancy, STIs, contraception and sexual health services **Programme type**: Peer led sex education **Theoretical base**: NR **Key components**: Sessions covered relationships, STIs, condoms and contraception. **Providers/delivers**: Peer led by pupils in year 12. **Length, duration**, i**ntensity**: 3 peer-led sessions, 1 hour each **Other details**: **Comparator**: Teacher-led SRE	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Kaplan-Meier techniques, logistic regression **Unit of allocation:** School **Unit of analysis:** Group **Time to follow-up**: 6 months; 18 months; 4 years and up to age 20.5 **Other details:** Accounted for correlation within schools using GEE methodology. **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: **Attrition** **Number of participants completing study**: 7,770 (88%) at 6 months; 6,656 (76%) at 18 months; 4,310 (49%) at 4 years **Reasons for non-completion**: One school withdrew and another 407 pupils left school (6 months)	**Knowledge and understanding** Knowledge of methods to prevent STIs was significantly better after peer-led SRE at first follow-up for girls (p=0.002) and at second follow-up for boys (p=0.001). No difference between peer-led intervention and control group in terms of knowledge of emergency contraceptive pill. **Attitudes and values** No difference between peer-led intervention and control group on following outcomes: regretted first intercourse, availability of contraception or common STIs, ability to identify local sexual health services, attitudes to condom use or sex, or confidence discussing contraception or sex with a partner. **Personal and social skills** Compared with the control group, girls in the peer-led group were more confident about using condoms (p=0.009), but were less confident about refusing to do something they did not want to do sexually (p=0.04). **Health and social outcomes related to alcohol and sexual health** Girls in the peer-led group were significantly less likely to report having had sex by age 16 years than were those in the control group (34.7% vs. 40.8%, p=0.0008); no difference was noted for boys. The proportion of girls or boys who had had sex by age 18 years was not significantly different between peer-led and control participants (difference: Girls -0.3; 95% CI -4.4, 3.8; Boys -2.4; 95% CI -7.2, 2.3). The estimated cumulative proportion reporting unprotected first heterosexual intercourse by age 16 years did not differ between intervention and control males (difference -1.4%; 95% CI -4.4, 1.6; p=0.36) or females (difference -0.4%; 95% CI -3.7, 2.8; p=0.79). At age 20 years, there was no significant difference in the proportion of girls with one or more abortions (adjusted OR 1.07; 95% CI 0.80, 1.42). The proportion of girls who had one or live births was lower in the peer led arm, but the difference was not significant (adjusted OR 0.77; 0.51, 1.15). Weighted analysis showed significantly fewer self-reported pregnancies among girls in the peer-led group by age 18 (adjusted OR 0.62; 95% CI 0.42, 0.91).

Study details	Intervention and population details	Analyses	Results
Tucker et al (2006) CBA - **Objective:** To examine the effect of the school-based sexual health education intervention comprising multi-professional classroom delivery and alongside drop-in clinics on teenage sexual behaviour outcomes **Setting:** School **Country:** UK **Funding source:** Scottish Executive Health Department	**Population details** **Inclusion**: Pupils in ten Lothian schools that had agreed to undertake staff training and planned to implement the new Healthy Respect SHARE programme **Exclusion**: NR **Total** n= 4,324 **Intervention**, n= 2,760 **Comparator**, n= 1,564 **Male** n (%) = NR **Mean age (range)**: median 14 yrs, 6 months **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: SHARE (see Wight et al 2002 for further details) **Focus/aim**: NR **Programme type**: **Theoretical base**: NR **Key components**: Revised teaching materials, multidisciplinary staff training, planned multidisciplinary classroom delivery by teachers and nurses, and access to sexual health services at drop-in centres for pupils. **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: NR **Other details**: **Comparator**: Pupils receiving non-SHARE programs in Grampian region.	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Multivariate models, logistic regression **Unit of allocation:** NA **Unit of analysis:** NA **Time to follow-up**: cross sectional survey in autumn terms of 2001 and 2003 **Other details:** NA **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: Similar in terms of the gender, age composition, number of siblings, family type, and ethnicity. **Attrition** **Number of participants completing study**: NA **Reasons for non-completion**: NA	**Knowledge and understanding** In 2001, pupils in the intervention schools reported less knowledge than students in comparison schools, and in 2003 there was no difference on this measure between intervention and comparison pupils [difference -0.7% (95% CI -4.2, 2.9). **Attitudes and values** In 2001, pupils in the intervention schools reported less positive attitudes, and intentions related to condom use compared with students in comparison schools. In 2003, the proportion of intervention pupils agreeing that condom use reduces the chance of contracting STIs increased significantly compared with the comparison schools [4.7% (95% CI 0.4–9.1); adjusted OR 1.00; (95% CI: 0.86, 1.17)]. **Personal and social skills** In 2001, pupils in the intervention schools were significantly less likely to consider it easy to obtain or use condoms properly compared with students in comparison schools, but in 2003 were more likely to be confident about getting and using condoms, although the effect for 'easy to get a condom' was non-significant after adjustment. Efficacy: easy to get a condom: adjusted OR 1.05 (95% CI 0.90, 1.22) Efficacy: easy to use a condom properly: adjusted OR 1.27 (95% CI 1.09, 1.47) **Health and social outcomes related to alcohol and sexual health** After taking account of sociodemographic pupil-level characteristics and school-level effect, the odds of pupils reporting previous sexual intercourse at age <16 years was higher in the intervention schools compared to the control schools in 2001 [OR 1.27 (95% CI 1.00,1.60) P=0.049] and 2003 [OR 1.31 (95% CI 0.94–1.82), P =0.11], although the effect in 2003 was no longer significant.

Study details	Intervention and population details	Analyses	Results
Wight et al (2002) RCT (Cluster) ++ **Objective:** To assess the impact of SHARE compared with conventional education **Setting:** School **Country:** UK **Funding source:** Medical Research Council and Health Education Board for Scotland	**Population details** **Inclusion**: Pupils at non-Catholic state schools in Tayside and Lothian regions **Exclusion**: NR **Total** n= 7,616 pupils **Intervention**, n= 3,616 (47%) **Comparator**, n= 4,000 (53%) **Male** n (%) = NR **Mean age (range)**: 13-15 years **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: Sexual Health and Relationships: Safe, Happy and Responsible (SHARE) **Focus/aim**: To reduce unsafe sexual behaviours, reduce unwanted pregnancies and improve the quality of sexual relationships **Programme type**: Sexual health and relationships education **Theoretical base**: **Key components**: **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: 2 years, 10 lessons in Year 9 and 10 lesson in Year 10. **Other details**: Included 5 day teacher training course **Comparator**: Existing sex education	**Process details** **Data collection method(s)**: Questionnaire/Survey; NHS recorded conceptions for 4.5 year follow up **Statistical method(s) used to analyse data**: Two sided t- test **Unit of allocation:** School **Unit of analysis:** Individual **Time to follow-up**: Six months after intervention **Other details:** Schools were offered incentives to participate **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: Data shown for whole school population **Attrition** **Number of participants completing study**: 5,854 (77%) at six months. **Reasons for non-completion**: Pupils had left school or were on work experience scheme	**Knowledge and understanding** Both males (p<0.005) and females (p<0.01) in the intervention group demonstrated significantly greater knowledge about sexual health than the control group. Difference (95% CI) Boys; Girls Knowledge about sexual health: 0.7 (0.2 - 1.2); 0.5 (0.1 - 0.9) **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** No impact of the intervention on reported sexual or contraceptive behaviour. Males in the intervention group showed significantly less regret at the timing of first sex with their current partner (p<.05) Difference (95% CI) Males; Females Experience of sexual intercourse after 1st programme year: -0.4 (-5.7, 4.9); -1.2 (-5.3, 3.0) First intercourse without condom after 1st programme year: -0.5 (-2.5, 1.5); 0.6 (-1.9, 3.1) Any evidence of sex unprotected against STDs*: 0.1 (-2.1, 2.3); 1.6 (-2.4, 2.9) Mean score for condom use**: 0.0 (-0.2, 0.2); -0.1 (-0.3, 0.1) Most recent intercourse without condom**: -1.3 (-5.9, 3.3); 0.9 (-5.7, 7.4) Most recent intercourse with oral contraception**: -2.5 (-8.0, 2.9); 2.4 (-4.1, 8.9) Unwanted pregnancies (girls only): 1.0 (0.6 - 1.8) Regret of first sexual intercourse: -0.1 (-5.9 - 5.7); 1.6 (-6.1 - 9.2) Regret of first sexual intercourse with most recent partner: -9.9 (-18.7 - -1.0); -7.7 (-16.6 - 1.2) Pressure at first intercourse: -6.4 (-13.7 - 0.9); -1.3 (-5.8 - 3.2) Enjoyment at last intercourse: 0.0 (-0.1 - 0.1); 0.0 (-0.1 - 0.2) *Whole follow-up sample **Sexually experienced students

SRE: Abstinence only programmes

Study details	Intervention and population details	Analyses	Results
Blake et al (2001) RCT (Cluster) + **Objective:** evaluation of interevtnion designed to imporve parent-child communication about sex **Setting:** Classroom **Country:** USA **Funding source:** US Dept of Health and Human Services	**Population details** **Inclusion**: NR **Exclusion**: NR **Total,** n= 351 **Intervention**, n= 190 (54.1) **Comparator**, n= 161 (45.9) **Male** n (%) = 52% **Mean age (range)**: 8th Grade **Ethnicity**: 85% Hispanic **Other baseline:** Middle Class Suburban Communities **Intervention details** **Name**: Managing the Pressures before Marriage (MPM) **Focus/aim**: To increase parental-child communication about sex **Programme type**: Abstinence **Theoretical base**: Skills based **Key components**: Curriculum plus homework **Providers/delivers**: Peer led **Length, duration**, i**ntensity**: 5 x 1 hour sessions **Other details**: **Comparator**: MPM curriculum only	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: t-test, kappa, McNemara tests, RMANCOVA, mixed modelling **Unit of allocation:** Group: Classroom **Unit of analysis:** Individual **Time to follow-up**: + 1 week **Other details:** **Baseline comparability** **Groups balanced at baseline:** No **Comments**: NR **Attrition** **Number of participants completing study**: Analysis on those subjects with matched Q's only **Reasons for non-completion**: NR	**Knowledge and understanding** No significant effects on abstinence knowledge **Attitudes and values** Generally, no significant effects on sexual attitudes, although MPM + homework students less likely to believe should expect sex if had sex before ($p < 0.05$); Increased sexual and substance refusal efficacy ($p < 0.01$; 0.001); Participants were less likely to believe they would have sex before finishing high school ($p < 0.01$), although no difference with regards to likelihood of having sex with someone they were attracted to. **Personal and social skills** Increased frequency of parent-child communication about sex ($p <0.01$), and school ($p < 0.001$) **Health and social outcomes related to alcohol and sexual health** No difference in sexual opportunities; no difference in avoidance/refusal of sex; Less recent and lifetime alcohol use ($p< 0.05$)

Study details	Intervention and population details	Analyses	Results
Borawski et al (2005) NRCT + **Objective:** To examine effectiveness of abstinence-until-marriage curriculum on knowledge, beliefs, efficacy, intentions, and behavior. **Setting:** School **Country:** USA **Funding source:** local Children and Family First Council	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 3017 **Intervention**, n= 1096 **Comparator**, n= 973 **Male** n (%) = 48.% **Mean age (range)**: 12-13yrs **Ethnicity**: White=19.1%; African American=72.8%; Hispanic=6.0%; other=2.1%. **Other baseline:** Parents/Guardians at home, School location, sexual activity and beliefs, contraception use. **Intervention details** **Name**: For Keeps **Focus/aim**: Abstinence until marriage. STI/HIV **Programme type**: Abstinence based **Theoretical base**: NR **Key components**: consequences of early sexual activity, character development, and future orientation, emphasizes how teen pregnancy and disease can interfere with life goals, the need for and development of resistance skills, and the links between alcohol, drugs, and vulnerability to sexual advances/desires. **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: 40 mins x 5 days **Other details**: **Comparator**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: General Lin**ear Models, Linear regression**. **Unit of allocation:** Individual : intervention Group : control **Unit of analysis:** Individual **Time to follow-up**: pre-test=1-5 days prior; post-test=16-25wks after **Other details:** NA **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: 2 differences - more suburban schools in intervention and length of follow up time. **Attrition** **Number of participants completing study**: 2069 **Reasons for non-completion**: NR	**Knowledge and understanding** Impact of Intervention on Behavioral Mediators, Total Sample, Mean (SE): HIV/STD knowledge scores (0-7) - I=4.70(0.4); C=4.41(0.5), P<0.001. **Attitudes and values** Impact of Intervention on Behavioral Mediators, Total Sample. Mean (SE): Belief in abstinence until older (1-4) - I=3.12(0.3); C=3.02 (.02), P<0.01. Belief in abstinence until marriage (1-4) - I=2.64(0.3); C=2.50(0.3), P<0.001. **Personal and social skills** Impact of Intervention on Behavioral Mediators, Total Sample, Mean (SE): Sexual impulse control (1-4) - I=3.08(0.2); C=3.03(0.3), NS. Condom-use efficacy - I=3.06 (.03); C=3.05 (.03), NS. Intention to engage in sex in the next 3 months - I=1.69 (.03); C=1.77 (.03), P<0.05. Intention to engage in sex in the next year - I=1.91 (.03); C=2.00 (.03), P<0.01. Intention to use condoms in future - I=3.53 (.03); C=3.65 (.03), P<0.01. **Health and social outcomes related to alcohol and sexual health** Impact of Abstinence-Until-Marriage Intervention on Sexual Behavior. Intervention vs Control. OR(95%CI): All Students (N=2069). Recent sex-0.85 (0.62,1.15), NS. Among sexually inexperienced students at baseline (n=1462) - Recent Sex -0.83 (0.52, 1.33), NS. Among sexually experienced students at baseline (n=439) - Recent sex – 0.87 (0.58,1.31), NS. Among all students who reported sexual intercourse during evaluation period (n=311) - Frequency of sexual intercourse [Results from linear regression: unstandardized coefficient (P), standard error, and standardized coefficient b(beta) associated with group membership (intervention vs control)] - beta = -1.74 s.e,=0.83 p=-.127, P<0.05. Multiple episodes of sexual intercourse (6 or more vs 5 or less) - 0.47 (0.26, 0.84), P<0.05. Two or more sexual partners - 0.50 (0.30,0.83), P<0.01. Consistent condom use - 1.19 (0.71,1.99), NS

Study details	Intervention and population details	Analyses	Results
Christopher and Roosa (1990) NRCT - **Objective:** To evaluate the impact of an abstinence promotion program **Setting:** School **Country:** USA **Funding source:** National Institute of Health	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 320 **Intervention**, n= 191 (60%) **Comparator**, n= 129 (40%) **Male** n (%) = 125 (39%) **Mean age (range)**: Mean 12.8 years **Ethnicity**: Hispanic 69%; Black 21%; Caucasian 8%; Native American 2% **Other baseline:** Age began dating **Intervention details** **Name**: "Success Express Program" **Focus/aim**: To promote abstinence **Programme type**: Abstinence promotion program **Theoretical base**: NR **Key components**: sessions designed to teach behaviours, attitudes and skills consistent with abstinence; graduation ceremony **Providers/delivers**: NR **Length, duration**, **intensity**: 6 sessions **Other details**: **Comparator**: did not receive the sessions	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Repeated measures ANOVA **Unit of allocation:** Group: classes **Unit of analysis:** Group **Time to follow-up**: Immediate post-test at 6 weeks (3 and 6 month NR) **Other details:** **Baseline comparability** **Groups balanced at baseline:** No **Comments**: intervention participants were on average half a grade more advanced and began dating at an earlier age than controls **Attrition** **Number of participants completing study**: 203 (63%) **Reasons for non-completion**: "most likely due to either absence or moving out of the area"	**Knowledge and understanding** **Attitudes and values** No significant impact of intervention on perceived best age for first sex or age expected for first sex, best age for marriage, lifetime sexual involvement or friends lifetime sexual involvement **Personal and social skills** No significant interactions for self-esteem or family communications **Health and social outcomes related to alcohol and sexual health** Participants in the intervention group significantly increased their mean sexual interaction between pre and post test whilst controls did not, [F(1,179)=4.29, p<.04]. Both male and female participants reported increases for several sexual behaviours, but male participants reported far more dramatic increases. There were large (>10%) shifts for males for "touching breasts", "touching female genitals" and "genital to genital contact". No changes were reported in rates of sexual intercourse.

Study details	Intervention and population details	Analyses	Results
Denny et al (1999) NRCT - **Objective:** To examine the effects of the three level of Sex Can Wait curriculum series on the knowledge, attitudes, and beliefs of students relative to sexuality. **Setting:** **Country:** **Funding source:**	**Population details** **Inclusion**: **Exclusion**: **Total** n= 15 schools **Intervention**, n= 8 schools **Comparator**, n= 7 schools **Male** n (%) = NR **Mean age (range)**: NR **Ethnicity**: Middle/High (PT): 78%/82% White, 19%/15% Black; 1%/1% Hispanic; 1%/1% Asian; 1%/1% American Indian **Other baseline:** NR **Intervention details** **Name**: Sex Can Wait **Focus/aim**: NR **Programme type**: Abstinence only **Theoretical base**: NR **Key components**: Address self-esteem, reproductive anatomy, physiology, changes associated with puberty, values and decision making skills; development and enhancement of communication skills; and goal setting and life planning **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: 5 weeks **Other details**: **Comparator**: Regular curriculum	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: ANCOVA **Unit of allocation:** School: schools **Unit of analysis:** Individual **Time to follow-up**: PT **Other details:** Teachers participated in a 3 1/2 day teacher training workshop **Baseline comparability** **Groups balanced at baseline:** No **Comments**: NR **Attrition** **Number of participants completing study**: middle 680; high 692 **Reasons for non-completion**: NR; numbers only presented for participants with matched pre- and post-test data	**Knowledge and understanding** Middle school: Significant PT differences between the SCW group and the comparison group relative to knowledge (p=0.001), attitudes (p=0.004) and decision making behaviours (p=0.015). High school: There were no significant PT differences between SCW students and comparison students on any outcome. **Attitudes and values** Middle school: No difference between SCW and comparison students on intention to remain abstinent. **Personal and social skills** See Knowledge **Health and social outcomes related to alcohol and sexual health** Middle school: No statistically significant difference in whether students reported intercourse in the last month between SCW and comparison students.

Study details	Intervention and population details	Analyses	Results
Denny & Young (2006) NRCT - **Objective:** To examine the results from an 18 month follow-up evaluation of an abstinence education curriculum series (NB: Only middle and high school data extracted) **Setting:** School **Country:** USA **Funding source:** NR	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= middle 698; high 337 **Intervention**, n= middle 326; high 226 **Comparator**, n= middle 372; high 111 **Male** n (%) = NR **Mean age (range)**: NR **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: Sex Can Wait curriculum **Focus/aim**: Abstinence education **Programme type**: SRE **Theoretical base**: NR **Key components**: self-esteem, reproductive anatomy and physiology, changes associated with puberty, values and decision-making skills, development and enhancement of communication skills, goal setting and life planning **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: Five weeks, 25 lessons (upper elementary) **Other details**: **Comparator**: Health education with a sex education component	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Logistic regression **Unit of allocation:** School **Unit of analysis:** Individual **Time to follow-up**: posttest, 18 months **Other details:** Curriculum series was implemented by teachers who had participated in a 3.5-day training workshop; process evaluation involved using teacher reaction sheets and teacher checklists *High school n completing: 287 (85%) PT; 244 (72%) 18 mo **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Not clear **Attrition** **Number of participants completing study**: *mid: 607 (87%) PT; 240 (34%) 18 mo **Reasons for non-completion**:NR	**Knowledge and understanding** Middle school: No statistically significant PT differences between Sex Can Wait and control students on measures of knowledge, attitudes, hopelessness, self-efficacy, decision making or abstinent intent. High school: Statistically significant differences at PT between Sex Can Wait students and the comparison group; SCW students were supportive of abstinence (p=0.004), had greater intentions to remain abstinent (p=0.001), and were less likely to report sexual intercourse ever (OR 0.29; 95% CI 0.15, 0.58), or sexual intercourse in the last 30 days (OR 0.36; 95% CI 0.18, 0.75). At 18-months follow-up, SCW students scored higher on knowledge (p=0.001) than comparison students and reported a greater intent to remain abstinent (p=0.05). There was no significant differences on the other measures including the behavioural measures. **Attitudes and values** See Knowledge **Personal and social skills** See Knowledge **Health and social outcomes related to alcohol and sexual health** At 18-months follow-up, students in the Sex Can Wait group were less likely to report that they had had sexual intercourse ever (OR 0.48; 95% CI 0.23, 0.98), and in the last month (OR 0.27; 95% CI 0.11, 0.67). There was no difference at PT on either measure (ever: OR 1.13; 95% CI 0.72, 1.77 / 30 days: OR 0.92; 95% CI 0.54, 1.55).

Study details	Intervention and population details	Analyses	Results
Donnelly et al (2001) NRCT **-** **Objective:** Evaluation of Project CARE, community + school adaptation of Sex Can Wait curriculum on substance related outcomes **Setting:** School **Country:** USA **Funding source:** US Dept Health and Human Services	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 839 **Intervention**, n= 413 (49.2%) **Comparator**, n= 426 (50.8%) **Male** n (%) = 401 (47.8%) **Mean age (range)**: 6th - 8th Grades **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: Project C.A.R.E **Focus/aim**: Promote abstinence until marriage **Programme type**: Abstinence **Theoretical base**: Social learning theory **Key components**: Goal setting; decision making, communication skills, self esteem enhancement **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: 23 sessions over 1 year **Other details**: **Comparator**: Workshop on questionnaire administration + education as normal	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: NR **Unit of allocation:** Group: Classroom **Unit of analysis:** Individual **Time to follow-up**: Post intervention **Other details:** **Baseline comparability** **Groups balanced at baseline:** True **Comments**: Small, but significant difference in age distribution **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**: NR	**Knowledge and understanding** **Attitudes and values** Intervention students score higher on three self esteem items; control students scored higher on 1 item (both $p < 0.02$) **Personal and social skills** No difference in social support from families **Health and social outcomes related to alcohol and sexual health** No significant differences in last month use of alcohol, tobacco, cannabis, inhalants, crack, heroin. Controls significantly more likely to report use of methamphetamine and crack (no between group analysis conducted)

Study details	Intervention and population details	Analyses	Results
Jorgensen et al (1993) NRCT + **Objective:** 6 month follow up of Project Taking Charge **Setting:** Home Ec classrooms **Country:** USA **Funding source:** OAPP	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 91 **Intervention**, n= 52 (57.1) **Comparator**, n= 39 (42.6) **Male** n (%) = 46.2% **Mean age (range)**: 14.4 **Ethnicity**: 51.3% vs 36.5% African American **Other baseline:** Family structure - most lived with 2 x parents **Intervention details** **Name**: Project Taking Charge **Focus/aim**: Promote abstinence and reduced teenage pregnancy **Programme type**: Abstinence **Theoretical base**: NR **Key components**: Classroom with parental components **Providers/delivers**: Home-economic teachers **Length, duration**, i**ntensity**: 6 weeks **Other details**: **Comparator**: Control classes in same school not receiving interevention	**Process details** **Data collection method(s)**: Questionnaire/Survey Some questions showed poor reliability **Statistical method(s) used to analyse data**: ANCOVA **Unit of allocation:** School **Unit of analysis:** Individual **Time to follow-up**: 6 months **Other details:** **Baseline comparability** **Groups balanced at baseline:** No **Comments**: No statistical assessment **Attrition** **Number of participants completing study**: 0 **Reasons for non-completion**: N/A	**Knowledge and understanding** Treatment group had a significantly greater increase in knowledge of sexual development, STDs , and sexual anatomy and physiology at posttest ($p < 0.001$). Knowledge of sexual anatomy and physiology remained significant at the $p<0.001$ level at 6 month follow up, whilst knowledge of STDs and sexual development remained significant at the $p<0.05$ level. Significant increase in knowledge of the complications associated with pregnancy were seen at post test($p < 0.05$). However they were no longer significant at 6 month follow up. **Attitudes and values** No significant change in sexual values, or educational aspirations. **Personal and social skills** No significant changes in self-reported communication between adolescents and parents on sexual issues, adolescent self-esteem. **Health and social outcomes related to alcohol and sexual health**

Study details	Intervention and population details	Analyses	Results
Roosa & Christopher (1990) NRCT - **Objective:** To the replicate the evaluation of an abstinence only adolescent pregnancy prevention programme **Setting:** School + other Programme offered at 20 different sites including public and parochial schools, community centers, Indian Reservations, and Police Athletic League branches. **Country:** USA **Funding source:** Office of Adolescent Pregnancy Programs	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 528 students **Intervention**, n= 339 **Comparator**, n= 129 **Male** n (%) = 43% **Mean age (range)**: mean 13 years **Ethnicity**: Hispanic 64%; Black 15%; White 12%; Native Americans 5% **Other baseline:** NR **Intervention details** **Name**: Success Express Program **Focus/aim**: Reduce premarital sexual activity **Programme type**: Abstinence only **Theoretical base**: NR **Key components**: Sessions focusing on self-esteem and family values, growth and development that occur during puberty, media and peer pressures, assertiveness training, and goal-setting skills. **Providers/delivers**: NR **Length, duration**, i**ntensity**: 6 sessions over 6 wks **Other details**: **Comparator**: Delayed treatment in some cases	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Repeated MANOVAs **Unit of allocation:** Group: Classrooms **Unit of analysis:** NR **Time to follow-up**: immediate PT **Other details:** **Baseline comparability** **Groups balanced at baseline:** No **Comments**: **Attrition** **Number of participants completing study**: 34% intervention and 24% control did not complete PT **Reasons for non-completion**: NR	**Knowledge and understanding** **Attitudes and values** **Personal and social skills** No difference at PT in self-esteem and family communication among intervention and control participants. **Health and social outcomes related to alcohol and sexual health** No difference at PT in the pre-marital sexual beliefs or sexual behaviours of intervention and control participants. Students in the control group increased the age at which they expected to have sex for the first time by over 1.5 years while the treatment group made a small change (0.5 years) in the desired direction.

Study details	Intervention and population details	Analyses	Results
Trenholm et al (2008) RCT(Individual) + **Objective:** to examine the impact of four abstinence-only programs including a) My Choice, My Future!; b) ReCapturing the Vision aimed at middle school students **Setting:** School **Country:** USA **Funding source:** US Department of Health and Human Services	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= MCMF: 448; RTV: 480 **Intervention**, n= MCMF: 286 (64%); RTV: 275 (57%) **Comparator**, n= MCMF: 162 (36%); RTV: 205 (43%) **Male** n (%) = NR **Mean age (range)**: NR; middle school students **Ethnicity**: NR **Other baseline:** family characteristics; intentions and attitudes about sex; sexual behaviour **Intervention details** **Name**: a) My Choice, My Future! b) ReCapturing the Vision **Focus/aim**: sexual activity and risks of pregnancy and STDs **Programme type**: abstinence education **Theoretical base**: NR **Key components**: NR **Providers/delivers**: NR **Length, duration**, i**ntensity**: MYMF: 3 years, 52 lessons; RTV: 1year, daily class **Other details**: **Comparator**: received no sex education at school	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: regression models **Unit of allocation:** Individual **Unit of analysis:** Group **Time to follow-up**: Unclear: "42-78 months" **Other details:** **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: RTV: control group significantly more likely to intend to have sex in the next year and in high school **Attrition** **Number of participants completing study**: MCMF: 448; RTV: 480 **Reasons for non-completion**: NR	**Knowledge and understanding** Intervention students in My Choice, My Future! scored significantly higher on identification of STDs (p<.001) and knowledge of unprotected sex risks (p<.005). My Choice, My Future! (Mean scores: Intervention; Control) Overall identification of STDs: 83;75 Identification of true STDs: 85; 77 Identification of false STDs: 78; 70 Knowledge of unprotected sex risks: .98; .94 Knowledge of STD consequ ences: .60; .55 ReCapturing the Vision (Mean scores: Intervention; Control) Overall identification of STDs: 63; 65 Identification of true STDs: 70; 70 Identification of false STDs: 48; 52 Knowledge of unprotected sex risks: .88; .86 Knowledge of STD consequences: .56; .56 **Attitudes and values** **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** There were no significant differences on the rate of sexual abstinence in either program. When all four programs were evaluated together there were no significant differences on condom use or pregnancies. My Choice, My Future! Remained abstinent (always): Intervention 38%; Control 38%; Abstinent (last 12 months): 45%; Control 44% ReCapturing the Vision Remained abstinent (always): Intervention 44%; Control 40%; Abstinent last 12 months: Intervention 48%; Control 43%

SRE: Abstinence plus programmes

Study details	Intervention and population details	Analyses	Results
Aarons et al (2000) RCT (Cluster) + **Objective:** To describe an evaluation of a school-based intervention to delay sexual intercourse **Setting:** School **Country:** USA **Funding source:** NIH Office of Research on Minority Health; The National Institute of Child Health and Human Development	**Population details** **Inclusion**: Seventh and 8th grade students at six schools selected based on their proximity to one of three adolescent health clinics affiliated with the study. **Exclusion**: Truant or suspended during study, incapable of reading and comprehending the questionnaire in English or Spanish. **Total** n= 522 students **Intervention**, n= 262 (50%) **Comparator**, n= 260 (50%) **Male** n (%) = 248 (48%) **Mean age (range)**: 12.8 years **Ethnicity**: 84% African American; 13% Hispanic; 2% Other **Other baseline:** 81% of females and 44% of males had not had sexual intercourse; 32% of females and 75% of males had used birth control the last time they had sex. **Intervention details** **Name**: NR **Focus/aim**: postponing sexual intercourse **Programme type**: sexual abstinence program **Theoretical base**: Social Cognitive Theory **Key components**: Three lessons on reproductive health; five-session postponing sexual involvement peer-led curriculum; voluntary booster sessions in 8th grade covering a range of health issues; booster assembly on STIs; student contest **Providers/delivers**: Peer led (10th and 11th graders) and external (health professional) **Length, duration**, **intensity**: 8 lessons over 2 months plus booster sessions **Other details**:	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Logistic and linear regression models **Unit of allocation:** School **Unit of analysis:** Individual, used as unit of analysis due to unexpected school level changes. **Time to follow-up**: 2 months (T_1); 6 months (T_2); 14 months (T_3) **Other details:** Students who did not attend study schools during 7th grade were excluded from the follow-up analyses. **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Some differences: Females in the control group had higher grades and school lunch participation rates and were less likely to live with both parents. Control males were more likely to not be African American, to live with a single parent or no parents, to participate in the free or reduced lunch program and to report no previous alcohol consumption **Attrition** **Number of participants completing study**: NA, study based on cross-sectional follow-up; 83% of 7th grade sample completed baseline and first follow-up; 69% of 8th grade sample completed second and third follow-up.	**Knowledge and understanding** Intervention males had significantly better knowledge of birth control than control males at all three follow ups: difference 0.34 (95% CI 0.17, 0.52; p<0.05); 0.21 (0.03, 0.39; p<0.05); 0.23 (0.03, 0.43; p<0.05). **Attitudes and values** Few significant differences between intervention and control groups at follow up times. Females in the intervention group were significantly more likely to intend not to have sex in the next 6 months at the end of 7th grade (OR 1.88; 95% CI 1.11, 3.19). Intervention males reported more positive attitudes towards delayed childbearing at the end of 7th grade (difference 0.24; 95% CI 0.06, 0.43) and the beginning of 8th grade (difference 0.21; 95% CI 0.03, 0.38). **Personal and social skills** No significant effects of the intervention on parent or boy/girlfriend communication. **Health and social outcomes related to alcohol and sexual health** After adjusting for differences between intervention and control students, intervention females had significantly higher virginity rates at the end of 7th grade and final follow up at the end of 8th grade and greater use of birth control/contraception at all follow ups. No significant differences were found between males in control and intervention groups. Females: OR (95% CI) T1; T2; T3 Virginity: 2.09 (1.10, 3.95); 1.77 (0.93, 3.36); 1.88 (1.02, 3.47) Used birth control/condoms at last sex: 3.86 (1.10, 13.47); 7.43 (1.90, 28.99); 3.39 (1.16, 9.95)

	Comparator: NR	**Reasons for non-completion**: NR	Males: OR (95% CI) T1; T2; T3 Virginity: 1.46 (.79, 2.71); 0.95 (.51, 1.76); 1.18 (0.61, 2.29) Used birth control/ condoms at last sex: 1.47 (0.64, 3.42); 1.03 (0.41, 2.61); 1.53 (.55, 4.26)

Study details	Intervention and population details	Analyses	Results
Barth et al (1992) NRCT + **Objective:** To evaluate Reducing the Risk: a sex education program **Setting:** School **Country:** USA **Funding source:** William and Flora Hewlett Foundation, Stuart Foundations, Division of Research Resources, National Institute of Health	**Population details** **Inclusion**: Ten school districts with a high school with at least two classes of sex education **Exclusion**: NR **Total** n= 1,033 students **Intervention**, n= 586 (57%) **Comparator**, n= 447 (43%) **Male** n (%) = NR **Mean age (range)**: mean age 15.4 years **Ethnicity**: White 61%, Latino 21%, Asian 9%, Black 2%, Native American 2%, Other 6% **Other baseline:** mother's education, whether they had a sister and a sister who was pregnant as a teenager, age when first had sex or tried alcohol, religion, religious attendance, living arrangements **Intervention details** **Name**: Reducing the Risk **Focus/aim**: reducing HIV/STDs and unwanted pregnancy **Programme type**: Sex education curriculum **Theoretical base**: Social learning models **Key components**: Role play, classroom activities, homework assignments, visits to birth control clinics **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: 15 * 50 minute lessons **Other details**: In most schools the same teacher taught the intervention and control curriculum. **Comparator**: Usual curriculum	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: **Unit of allocation:** Classroom **Unit of analysis:** Group **Time to follow-up**: PT, 6 months **Other details:** None **Baseline comparability** **Groups balanced at baseline:** True **Comments**: no sig differences on any factor **Attrition** **Number of participants completing study**: 832 (19.5%) post test; 722 (30%) follow up **Reasons for non-completion**: NR	**Knowledge and understanding** Increases in knowledge scores were significantly greater in the treatment than control group by post-test ($p<0.001$) and by six months ($p<0.001$) **Attitudes and values** Significantly fewer treatment group members concluded that peers were having sex and using birth control ($p<0.05$). Overall pregnancy prevention intentions were significantly greater in the treatment than control group by 6 months ($p<0.01$) **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** By six months, there were no significant differences in the percentages of students in each group who ever had sex or had sex in the past 30 days, estimated that peers were using birth control, had a pregnancy scare or were currently pregnant Treatment; Control post-test, 6 months Ever had sex: N=424, n=170 (40%), N=425, n=187 (44%); N=285, n= 117 (41%), N=289, n=139 (48%) Had sex in last 30 days: N=167, n=72 (43%), N=182, n=100 (55%); N=117, n=59 (50%), N=134, n=71 (53%) Experienced a pregnancy scare: N=164, n=93 (57%), N=187, n=105 (56%); N=115, n=66 (57%), N=137, n=73 (53%)

Study details	Intervention and population details	Analyses	Results
Borawski et al (2009) RCT (Cluster) + **Objective:** To determine if Be Proud! Be Responsible! Would be effective when taught within a high school health curriculum by school personnel (e.g health teachers and school nurses) **Setting:** School **Country:** USA **Funding source:** National Institute of Child Health and Human Development	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1,357 **Intervention**, n= 631 **Comparator**, n= 726 **Male** n (%) = 48.2% **Mean age (range)**: 45.8% Grade 9; 54.2% Grade 10; mean 15 yrs **Ethnicity**: White 49.7%; Black 35.8%; Hispanic 11.9%; Other 2.6% **Other baseline:** Ever had intercourse 38.1%; carried condoms or had quick access to them 39.6% **Intervention details** **Name**: Be Proud! Be Responsible! (BPBR) **Focus/aim**: Abstinence, safer sex **Programme type**: Abstinence-plus **Theoretical base**: Social cognitive theory, theory of reasoned action, theory of planned behaviour **Key components**: Promotion of abstinence as the most effective way for adolescents to protect themselves from pregnancy and STDs, information and appropriate skill building about safer-sex practices** **Providers/delivers**: Other **Length, duration**, i**ntensity**: six 50-minute modules; booster session **Other details**: **Comparator**: Designed to match the BPBR curriculum in structure and nature of the activities	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: General linear model analyses (adjusted standard errors of estimates for intragroup correlations) **Unit of allocation:** School **Unit of analysis:** Group **Time to follow-up**: PT, 4- and 12-months follow-up **Other details:** All participants received a gift each time they completed a survey. Teacher and nurse facilitators for both curricula attended separate two-day training sessions (12 hrs in total) **One 10-minute activity (How to Make Condoms Fun and Pleasurable) in the condom use skills session was dropped **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Small but significant differences between the intervention and control groups in gender, ethnicity, neighbourhood socioeconomic status and session attendance. **Attrition** **Number of participants completing study**: 97% and 92% completed 4- and 12-mth FU	**Knowledge and understanding** Students exposed to BPBR reported significantly greater knowledge about STDs and condoms immediately following the intervention than controls (both p<0.001), and these differences were sustained for one year after the intervention (p<0.001 for condom knowledge and p<0.05 for STDs knowledge). **Attitudes and values** Condom use prevention beliefs were significantly higher in male and female intervention students than control students at PT (p<0.01 and p<0.001, respectively), but no difference at subsequent follow-ups and no intervention effect on other beliefs (condom use, condom use hedonistic, abstinence). There was no difference in intentions to have sex or to use condoms between intervention and control students, except at the 4-mth follow up when female intervention students were less likely to report an intention to have sex (p<0.05). **Personal and social skills** Significant difference between male intervention and control students at PT on efficacy outcomes (impulse control, condom negotiation skills, and condom technical skills) at PT. At 4- and 12-months follow-up, only the significant effect on condom negotiation skills remained (p<0.01 at both surveys). For females, intervention students reported high condom technical skills at PT (p<0.001) and 4 months (p<0.01), but no difference at 12-month or on any other efficacy measures. **Health and social outcomes related to alcohol and sexual health** Among students who were sexually inexperienced at baseline, the intervention had a significant effect on only one behavioral outcome; at 4-mths follow up a higher proportion of intervention students than of control students reported having talked to a health professional about a sex-related matter since PT (17.1% vs. 10.1%, p<0.01).

		Reasons for non-completion: NR	Among sexually experienced adolescents at baseline there were no behavioural impacts of the intervention.

Study details	Intervention and population details	Analyses	Results
Boyer & Shafer (1997) NRCT - **Objective:** Evaluation of a knowledge-and cognitive-behavioural skills-building intervention to prevent STIs **Setting:** School **Country:** USA **Funding source:** NR	**Population details** **Inclusion**: Students attending physical education classes in four urban public high schools. **Exclusion**: NR **Total** n= 695 recruited, 513 provided data at follow-up **Intervention**, n= 210 (40.9) **Comparator**, n= 303 (59.1) **Male** n (%) = 41% **Mean age (range)**: 14.4 years (range 13-17) **Ethnicity**: 30% Chinese, 20% Latino, 16% African American, 12% other or multi-ethnicity/race, 10% Caucasian, 6% Filipino, and 6% other Asian groups **Other baseline:** 22% reported sexual experience at baseline; 15% had a history of STDs and 10% had a history of pregnancy/impregnation; 70% rarely or never used condoms **Intervention details** **Name**: NR **Focus/aim**: Knowledge and skills relevant to STD and HIV prevention and making healthy lifestyle choices. **Programme type**: STI prevention **Theoretical base**: NR **Key components**: Didactic knowledge and skills building sessions (utilising games, vignettes, and role-play exercises) **Providers/delivers**: Other **Length, duration**, i**ntensity**: Three sessions over 3 days **Other details**: **Comparator**: One day of didactic education (comparable to the information provided to intervention students)	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Hierarchal regression analyses **Unit of allocation:** School **Unit of analysis:** Individual **Time to follow-up**: +4 weeks **Other details:** Only students who completed the follow-up assessment were included in the analyses. **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Baseline differences controlled for in analyses **Attrition** **Number of participants completing study**: 513 (74%) **Reasons for non-completion**: Did not complete baseline and follow up questionnaires	**Knowledge and understanding** The intervention had a small, but significant impact on STD knowledge ($p < 0.05$). **Attitudes and values** NR **Personal and social skills** The intervention had a significant impact on sexual risk prevention skills ($p < 0.05$) and substance use prevention skills ($p < 0.001$). **Health and social outcomes related to alcohol and sexual health** Relative to the control group, the intervention did not have a significant impact on condom use, the number of sexual partners, condom use the previous month, and alcohol and drug use.

Study details	Intervention and population details	Analyses	Results
Caron et al (2004) NRCT + **Objective:** To determine the extent to a peer education programme was effective in changing medium-term behaviour and its underlying social cognitive determinants among senior and junior high school students with respect to postponing sexual intercourse and condom use. **Setting:** High schools in Quebec **Country:** Canada **Funding source:** Quebec Council for Social Research	**Population details** **Inclusion**: Students who attended six high schools **Exclusion**: NR **Total** n= 945 junior high school students (87%), n=477 senior high school students (81%) **Intervention**, n=369 junior high, n=147 senior high **Comparator**, n=329 junior high, n=159 senior high **Male** n (%): 44% **Mean age (range)**: 13-14 yrs (junior), 15-16 yrs (senior) **Ethnicity**: >90% born in Canada **Other baseline:** 14% junior high and 32% senior high reported sexual intercourse in the last 3 months **Intervention details** **Name**: Protection Express Programme **Focus/aim**: Postpone sexual intercourse and condom use. **Programme type**: Social Cognitive Theory **Theoretical base**: Social Cognitive theory, Planned Behaviour, Interpersonal Behaviour. **Key components**: Peer training programme for senior high school students, developed educational presentation on one of five topics: postponing sexual intercourse, communication and assertiveness in relationships, equality in relationships, conditions to a healthy relationship, and condom use. Peer presentations subsequently presented to junior students **Providers/delivers**: Peer led **Length, duration**, i**ntensity**: Junior: not reported; Senior: 25 hrs peer training **Other details**: **Comparator**: usual sexual education programme	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: ANCOVA **Unit of allocation:** Group: groups in all conditions within schools. **Unit of analysis:** Group **Time to follow-up**: PT, 9 months **Other details:** **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: Only significant difference between place of birth, for both Juniors and Seniors P<0.05. **Attrition** **Number of participants completing study**: J=369; S=147; 29.4% drop-out rate. **Reasons for non-completion**: High student absenteeism.	**Knowledge and understanding** NR **Attitudes and values** At 9-months, senior high intervention and control did not differ in their intentions to postpone sexual intercourse, or their perceived behavioural control (beliefs regarding their ability to overcome obstacles to postponing sex) or anticipated regret. However the intervention group scored higher than control students on other measures including a direct and indirect measure of attitude to postponing sex (both p<0.001), behaviour control (p<0.001, direct), personal normative beliefs (p<0.01), role beliefs (p<0.001) and perceived self-efficacy for postponing sexual involvement (p<0.001). Junior high intervention students scored higher than control students on all of the attitude and beliefs measures with respect to postponing sexual intercourse: intention (p<0.001), attitude (p<0.001, direct), perceived self-efficacy (p<0.001), role beliefs (P < 0.001) and anticipated regret (p <0.001). Senior high intervention group scored higher than the control group on the following attitude and belief measure relating to condom use: perceived behavioural control (p<0.001, indirect), and perceived self-efficacy (p<0.001). Among junior high students, intervention students scored higher than control students in their intentions for condom use (p<0.001) and role beliefs regarding condom use (p<0.001). **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** At 9-months, no difference between senior high or junior high intervention and control groups with respect to postponing sexual intercourse in the last three months. At 9-months, senior high intervention students were more likely than control students to report using a condom consistently with their regular or occasional sexual partner (p<0.01). Junior high intervention and control students did not differ with respect to condom use at the 9-month follow-up.

Study details	Intervention and population details	Analyses	Results
Coyle et al (1999); Coyle et al (2001) RCT (Cluster) + **Objective:** to evaluate the Safer Choices program **Setting:** School **Country:** USA **Funding source:** Centres for Disease Prevention and Control	**Population details** **Inclusion**: Ninth grade students in 20 schools **Exclusion**: NR **Total** n= 4,310 students **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = 48% (of 3677 participants followed up) **Mean age (range)**: NR - ninth grade students **Ethnicity**: 31% White, 27% Hispanic, 18% Asian or Pacific Islander, 17% African American, <1% American Indian or Alaska Native, 7% Other **Other baseline:** lifetime sexual behaviour and condom use at last sex. Parents education, living arrangements with parents, Good Point Average **Intervention details** **Name**: Safer Choices **Focus/aim**: To reduce the number of students engaging in unprotected sexual intercourse **Programme type**: HIV, STD and pregnancy prevention **Theoretical base**: social cognitive theory, social influence theory **Key components**: curriculum, role playing, role model stories, parent newsletters, homework assignments,	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Multilevel models **Unit of allocation:** Schools **Unit of analysis:** Group **Time to follow-up**: End of the first year (Coyle et al 1999) and 31 months (Coyle et al 2001) **Other details:** Students who left school before the second year of intervention were excluded (n=441). **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Significant difference on some outcomes; adjusted for in analyses. **Attrition** **Number of participants completing study**: 3677 (85%) first year, 3058 at 31 months (71%) **Reasons for non-completion**: Left school, were in a higher grade	**Knowledge and understanding** At the end of the first year, increases in knowledge regarding HIV and STIs were significantly greater for intervention students compared to control students (mean difference [SE] HIV 0.13 [0.03]; STIs 0.11 [0.02] both p=0.00). At 31 months, the effects remained significant on knowledge of HIV and STDs (mean difference [SE] HIV 0.11 [0.02]; STIs 0.09 [0.02]; both p=0.00). **Attitudes and values** At the end of the first year, students in the intervention schools expressed more positive attitudes toward condom use (mean difference [SE] 0.08 [0.04]; p=0.00) and decreased barriers toward condom use (mean difference [SE] -0.12 [0.04]; p=0.00), higher self-efficacy for condom use (mean difference [SE] 0.13 [0.02]; p=0.00), and higher levels of risk perception (mean difference [SE] HIV 0.14 [0.05]; p=0.00; STIs 0.11 [0.04]; p=0.02) than control students. No difference on the following measures: attitude about sex; self efficacy for refusing sex; and self efficacy for communication. At 31 months, intervention students expressed significantly more positive attitudes than comparison students about condoms (mean difference [SE] 0.07 [0.02]; p=.01) and reported significantly fewer barriers to condom use (mean difference [SE] -0.11 [0.04]; p=0.01), greater self-efficacy for condom use (mean difference [SE] 0.11 [0.03]; p=0.00) and perceived HIV and STD risks to be higher (mean difference [SE] HIV 0.11 [0.05]; p<0.05; STIs 0.09 [0.04]; p<0.05). No difference on the following measures: attitudes about sex; normative beliefs about condoms; self efficacy for refusing sex; and self efficacy for communication. **Personal and social skills** At the end of the first year, intervention students reported significantly higher levels of communication with their parents than control students (mean difference [SD] 0.06 [0.03]; p=0.03) and marginally higher levels at the 31-

	school-community linkages **Providers/delivers**: Teachers **Length, duration**, **intensity**: 20 sessions over 2 years, 10 per year **Other details**: **Comparator**: Standard, knowledge-based HIV prevention curriculum		month follow-up (p=0.06). **Health and social outcomes related to alcohol and sexual health** At the end of the first year, there were no differences in incidence of sexual initiation between intervention and control students (OR 1.13; 95% CI 0.71, 1.82). However, among sexually experienced students, intervention students reported fewer acts of sexual intercourse without a condom in the past 3 months compared to the control group (mean difference [SE] 0.50 [0.31]; p=0.03) and were more likely to have used condoms (OR 1.91; 95% CI 1.13, 3.21) or protection again pregnancy (OR 1.62; 95% CI 1.05, 2.50) at last intercourse. There was no difference between intervention and control students on the following behavioural measures: number of sexual partners without a condom in past 3 months; number of times had intercourse in last 3 months; number of partners in last 3 months; use of alcohol/other drugs before sex in last 3 months; and tested for HIV or other STDs. At 31 months, compared to control students, intervention students reported fewer acts of sexual intercourse without a condom in the last 3 months (mean difference [SE] 0.63 [0.23]; p=0.05) and fewer sexual partners without a condom in the last 3 months (mean difference [SE] 0.73 [0.14]; p=0.02). Intervention students were also significantly more likely to have used condoms (OR 1.68; 95% CI 1.02, 2.76) or other pregnancy prevention methods at last intercourse (OR 1.76; 95% CI 1.01, 30.7). No other significant effects on behaviour were reported.

Study details	Intervention and population details	Analyses	Results
Coyle et al (2004) RCT (Cluster) + **Objective:** To evaluate the long-term effectiveness of Draw the Line/Respect the Line, a theoretically based curriculum designed to reduce sexual risk behaviours among middle school adolescents. **Setting:** School **Country:** USA **Funding source:** National Institute of Mental Health	**Population details** **Inclusion**: Sixth grade students in 19 public middle schools **Exclusion**: NR **Total** n= 2,829 students **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = 49.9% **Mean age (range)**: mean 11.5yrs **Ethnicity**: 5.2% African American, 15.9% Asian, 59.3% Latino, 16.5% White, and 3.1 % other **Other baseline:** Approximately 4% reported having had sexual intercourse **Intervention details** **Name**: Draw the Line/Respect the Line **Focus/aim**: HIV/AIDS, unwanted pregnancies. **Programme type**: social skills training **Theoretical base**: social cognitive theory and social inoculation theory **Key components** 6th grade: limit setting and refusal skills in non-sexual context; 7th grade: setting personal limits, understanding consequences of sex, using ultra and interpersonal skills, maintain limits and respect others limits; 8th grade: HIV-infected speaker, condom demonstration and other methods of contraception, refusal skills. **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: 20 sessions (5 lessons in 6th grade; 8 lessons in 7th grade and 7 lessons in 8th grade) **Other details**: Health educators trained prior to programme implementation **Comparator**: usual classroom activities regarding HIV, other STD, and pregnancy prevention.	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Repeated measure logistic and linear regression **Unit of allocation:** School **Unit of analysis:** Group **Time to follow-up**: Yearly up to 1 years follow-up (end of ninth-year) **Other details:** **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Controlled for baseline peer norms. **Attrition** **Number of participants completing study**: 91% 7th grade, 88% 8th grade; and 64% 9th **Reasons for non-completion**: NR	**Knowledge and understanding** Both girls and boys in the intervention group reported significantly greater HIV and condom-related knowledge than control students at all three follow-ups (boys: p=0.04; p=0.000; p=0.01, respectively; girls: p=0.000; p=0.000; p=0.04, respectively). **Attitudes and values** Based on group x time interaction, boys in the intervention condition had more positive attitudes toward not having sex than control students (p=0.003), perceived fewer peer norms supporting sex (p=0.001), had stronger sexual limits (p=0.004), and were less likely to place themselves in situations that could lead to sexual behaviours (p<0.001). Compared to control girls, intervention girls perceived fewer peer norms supporting sex (p=0.02). In pairwise comparisons, intervention girls reported significantly fewer incidents of unwanted sexual advances at the eighth grade follow-up than control girls (p=0.02) **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Intervention group boys were significantly less likely than control boys to report ever having sex at all three follow-ups (p=0.04; p=0.01; and p=0.02, respectively). No statistically significant effects on this outcome for girls. Intervention boys were less likely than boys in the control group to report having had sex at all follow-ups (p=0.01; p=0.002; p=0.03, respectively). Again, no statistically significant effects on this outcome for girls Intervention group boys fewer occasions of sexual intercourse in the past 12 months than control students at the 8th grade follow-up (p=0.01) and fewer sexual partners over the same time period (p=0.02). No treatment effects were found for girls, or boys at the 9-month follow-up. No treatment effects on condom use at follow-up.

Study details	Intervention and population details	Analyses	Results
Eisen et al (1990); Eisen et al (1992) RCT (Cluster) + **Objective:** Evaluation of sex and contraceptive education programme **Setting:** School or community-based **Country:** USA **Funding source:** Texas Department of Human Services; The University of Texas at Austin Research Institute; The Lyndon B. Johnson School of Public Affairs, University of Texas at Austin; The Hogg Foundation for Mental Health; The William and Flora Hewlett Foundation; and National Institute of Child Health and Human Development.	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1,444 students **Intervention**, n= 722 (50) **Comparator**, n= 722 (50) **Male** n (%) = 48% **Mean age (range)**: 13-19 **Ethnicity**: 53% Hispanic, 24% Black, 15% White **Other baseline:** 37% reported they had had sexual intercourse; 49% used contraception at last intercourse (74% used a condom) **Intervention details** **Name**: Health Belief Model-Social Learning Theory Model curriculum **Focus/aim**: Promote abstinence and safe sex behaviours **Programme type**: Sex Education **Theoretical base**: Health Belief Model, Social Learning Theory **Key components**: Information, discussion of emotions, decision making, personal responsibility **Providers/delivers**: Other **Length, duration**, i**ntensity**: 8-12 hrs depending on site **Other details**: **Comparator**: Usual outreach and family planning programmes	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Regression **Unit of allocation:** Classroom **Unit of analysis:** Individual **Time to follow-up**: PT, 12 months **Other details:** Discriminant analysis showed that drop outs were more likely to have reported sex **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: None **Attrition** **Number of participants completing study**: PT, n=1,328 (92.0%); 12-months, n=888 (61.5%) **Reasons for non-completion**: NR	**Knowledge and understanding** Participants in intervention group reported greater sexual knowledge than control group students at PT ($p<0.05$) **Attitudes and values** At PT, there no difference in health beliefs between intervention and control students. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** At PT, among students who were sexually inexperienced at baseline, there was no difference between intervention and control students in abstinence maintenance. At 12-months, among students who were sexually inexperienced at baseline, there was no difference between intervention and control groups in use of contraceptives at first intercourse (64% vs. 71%), use of an effective method at most recent intercourse (55% vs. 61%), or in Contraceptive Efficiency (means 9.87 vs. 11.32). Neither intervention nor control students showed a significant improvement in effective contraceptive use at most recent intercourse. No differences between intervention and control groups programs in pregnancy responsibility for males (7% vs. 4%) or pregnancy for females (9% vs. 12%).

Study details	Intervention and population details	Analyses	Results
Hubbard et al (1998) NRCT + **Objective:** To determine the effects of Reducing the Risk on sexual behaviours of students **Setting:** School **Country:** USA **Funding source:** Arkansas State Department of Education, Comprehensive School Health Program	**Population details** **Inclusion**: Students in 10 school districts **Exclusion**: NR **Total** n= 532 students **Intervention**, n= 267 (50%) **Comparator**, n= 265 (50%) **Male** n (%) = 48% **Mean age (range)**: Grades 9-12 **Ethnicity**: 85% White, 14% Black, 1% Other **Other baseline:** 41% reported having had sex **Intervention details** **Name**: Reducing the Risk **Focus/aim**: To reduce risk taking behaviour **Programme type**: Abstinence Plus **Theoretical base**: social learning theory, social influence theories **Key components**: small number of behavioural goals; activities that personalize information on the risks of unprotected sex and to avoid these risks, social influence training, skill development, support for personal values and group norms against unprotected intercourse **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: 16 lessons **Other details**: **Comparator**: received health education program with regular sexuality instruction	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Tests for differences in proportions (not specified) **Unit of allocation:** School district **Unit of analysis:** Group **Time to follow-up**: 18 months **Other details:** Only students who completed baseline and follow-up surveys included in analyses. **Baseline comparability** **Groups balanced at baseline:** Mostly **Comments**: Comparison group had more students in the 12th grade, small differences only in religious attendance and affiliation **Attrition** **Number of participants completing study**: 212 (36%) **Reasons for non-completion**: graduation, family mobility, student dropouts, absenteeism, missing data	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** Significant increases in communication between parents and children in intervention group compared to control group on two out of four measures. Intervention; control Talked to parent about birth control: 31%; 19%; p<0.05 Talked to parent about protection from STD/HIV: 21%; 9%, p<0.05 Talked to parent about becoming pregnant: 14%, 10%, NS Talked to parent about abstinence: 24%; 14%, NS **Health and social outcomes related to alcohol and sexual health** A significantly greater number of control students (n=24/56; 43%) than intervention students (n=19/69; 28%) were sexually active at follow-up (p<0.05). Of these students, significantly more of the intervention group reported using STI/HIV and pregnancy prevention: intervention 89% (N=17/19); control 46% (N=11/24).

Study details	Intervention and population details	Analyses	Results
Jemmott et al (1998) RCT (Individual) ++ **Objective:** Evaluate the effects of abstinence and safer-sex HIV risk-reduction interventions of young inner-city African American adolescents' HIV sexual risk behaviours when implemented by adult facilitators as compared with peer co facilitators. **Setting:** School + community NA **Country:** USA **Funding source:** National Institute of Mental Health.	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 659. **Intervention**, n= Abstin=215; Safer=218 **Comparator**, n= 214 **Male** n (%) = NR **Mean age (range)**: mean 11.8yrs **Ethnicity**: African American **Other baseline:** Sexual activity, sexual orientation. **Intervention details** **Name**: Spruce Adolescent Health Promotion Project **Focus/aim**: HIV/AIDS **Programme type**: Abstinence/Safer-sex education **Theoretical base**: social cognitive theory, reasoned action, planned behaviour. **Key components**: theory-based abstinence and safer-sex interventions. **Providers/delivers**: Peer led and Teachers **Length, duration**, i**ntensity**: 8 x 1hr modules over 2 x Saturdays. **Other details**: **Comparator**: see above. Same	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Analyses of variance, chi-squares, t-tests, analyses of covariance. **Unit of allocation:** Individual **Unit of analysis:** Group **Time to follow-up**: 3mths, 6mths, 12mths. **Other details:** **Baseline comparability** **Groups balanced at baseline:** No **Comments**: NR **Attrition** **Number of participants completing study**: 3=429, 6=411, 12=406 **Reasons for non-completion**: lost to follow-up	**Knowledge and understanding** Adjusted post intervention Means(SD'd). Abstinence (215); SaferSex (218) Control (214): Condom use knowledge - A=2.49(1.30) P=0.72; S=3.79(1.30) P<0.001; C=2.54(1.30) P<0.001. Knowledge about HIV risk reduction - A=21.78(5.75) P<0.001; S=25.40(5.77) P<0.001; C=19.15(5.76) P<0.001. **Attitudes and values** Adjusted post intervention Means(SD'd). Abstinence(215); SaferSex(218); Control(214): Abstinence Prevention Beliefs - A=3.49(0.98) P<0.001; S=3.26(0.98) P=0.12; C=3.11(0.98) P=0.02. Abstinence Goal-Attainment Beliefs - A=3.20(1.11) P=0.04; S=3.07(1.11) P=0.36; C=2.97(1.11) P=0.24. Attitudes toward sex - A=2.06(0.93) P<0.001; S=2.35(0.94) P=0.15; C=2.49(0.95) P=0.002. Intentions to have sex - A=2.10(1.00) P=0.02; S=2.32(1.01) P=0.86; C=2.34(1.01) P=0.03. Condom prevention beliefs - A=3.52(0.79) P=0.13; S=3.91(0.79) P<0.001; C=3.63(0.79) P<0.001. Condom hedonistic beliefs - A=3.53(0.65) P=0.77; S=3.79(0.65) P<0.001; C=3.51(0.65) P<0.001. Condom availability control beliefs - A=3.54(0.66) P=0.17; S=3.80(0.66) P=0.01; C=3.63(0.66) P<0.001. Impulse control beliefs - A=3.67(0.77) P=0.13; S=3.74(0.78) P=0.02; C=3.55(0.78) P=0.34. Negotiation skill beliefs - A=3.85(0.81) P=0.87; S=3.88(0.81) P=0.77; C=3.86(0.81) P=0.65. Technical skill beliefs - A=3.64(0.78) P=0.76; S=3.72(0.78) P=0.16; C=3.61(0.78) P=0.26. **Personal and social skills** Adjusted postintervention Means(SD'd). Abstinence(215); SaferSex(218); Control(214): Self-efficacy to use Condoms - A=3.85(0.80) P=0.30; S=3.93(0.80) P=0.05; C=3.76(0.80) P=0.33. Intentions to use Condoms - A=4.00(0.81) P=0.85; S=4.06(0.81) P=0.49; C=4.01(0.81)

			P=0.38. **Health and social outcomes related to alcohol and sexual health** Sexual behaviour at 3 months. Abstinence(213); Safer(216); Control(207): % has sexual intercourse - A=12.5(23/184) P=0.02; S=16.6(29/175) P=0.53; C=21.5(37/172) P=0.08. % sexually inexperienced preintervention - A=2.9 (4/136) P=0.02; S=8.6(11/128) P=0.64; C=10.3(13/126) P=0.06. % sexually experienced preintervention - A=42.5 (17/40) P=0.12; S=43.6(17/39) P=0.38; C=58.5(24/41) P=0.52. Adjusted mean (SD) freq of sex - A=0.75(2.24) P=0.43; S=0.60(2.24) P=0.72; C=0.85(2.24) P=0.66. % consistent condom use - A=38.1(8/21) P=0.88; S=65.6(21/32) P=0.02; C=36.1(13/36) P=0.05. Mean (SD) frequency of condom use [1=never to 5=always) - A=4.09(1.18) P=0.17; S=4.22(1.21) P=0.05; C=3.56(1.63) P=0.74. % reporting unprotected sex - A=6.4(11/17) P=0.34; S=4.0(7/175) P=0.04; C=11.6(19/164) P=0.26. % sexually inexperienced preintervention - A=0.1(1/136) P=0.18; S=1.5(2/131) P=0.38; C=3.2(4/124) P=0.55. % sexually experienced at preintervention - A=32.0(8/25) P=0.67; S=12.9(4/31) P=0.03; C=42.9(15/35) P=0.10. Adjusted mean (SD) frequency of unprotected sex - A=0.14(0.60) P=0.60; S=0.07(0.60) P=0.04; C=0.21(0.60) P=0.24. Adjusted mean(SD) sexually inexperienced at preintervention - A=0.06(0.59) P=0.60; S=0.06(0.59) P=0.68; C=0.08(0.59) P=0.90. Adjust mean(SD) sexually experienced at preintervention - A=0.53(0.60) P=0.49; S=0.12(0.59) P<0.001; C=0.71(0.64) P=0.002. Sexual behaviour in past 3 mths at 6mth follow-up. Abstinence(204); Safer(207); Control(211): % reporting sexual intercourse - A=17.2(30/174 P=0.14; S=15.0(25/167) P=0.18; C=22.7(39/172) P=0.92. Adjusted mean (SD) freq uency of sex - A=1.24(5.86) P=0.44; S=0.48(5.86) P=0.08; C=1.61(5.86) P=0.33. Adjusted mean(SD) sexually inexperienced at preintervention - A=0.41(4.77) P=0.56; S=0.41(4.77) P=0.52; C=0.68(4.77) P=0.95.

			Adjusted mean(SD) sex experienced at preintervention - A=2.12(4.89) P=0.31; S=0.55(4.84) P<0.001; C=4.46(4.85) P=0.02. % reporting consist condom use - A=44.4(12/27) P=0.56; S=50.0(14/28) P=0.29; C=37.5(15/40) P=0.67. Mean(SD) frequency of condom use (1=never to 5=always) - A=3.77(1.19) P=0.13; S=3.99(1.22) P=0.03; C=3.25(1.60) P=0.56. % unprotected sex - A=7.4(12/163) P=0.49; S=7.1(12/169) P=0.34; C=10.8(18/166) P=0.81. % sexually inexperienced at preintervention - A=3.2(4/125) P=0.51; S-4.0(5/124) P=0.76; C=4.8(6/124) P=0.72. % sexually experienced at preintervention - A=27.6(8/29) P=0.85; S=18.8(6/32) P=0.28; C=32.4(12/37) P=0.40. Adjusted mean(SD) frequency of unprotect sex - A=0.25(0.98) P=0.57; S=0.17(0.98) P=0.26; C=0.29(0.98) P=0.59. Adjusted mean(SD) sexually inexperienced at preintervention - A=0.14(0.99) P=0.85; S=0.14(0.99) P=0.92; C=0.15(0.99) P=0.93. Adjusted mean(SD) sexually experienced at preintervention - A=0.73(1.00) P=0.57; S=0.33(0.99) P=0.03; C=0.81(1.05) P=0.14. Sexual behaviour in past 3 mths at 12mth follow-up. Abstinence(200); Safer(206); Control(204): % reporting sexual intercourse - A=20.0(35/175) P=0.42; S=16.5(27/164) P=0.37; C=23.1(40/173) P=0.91. Adjusted mean(SD) frequency of sex - A=0.82(2.97) P=0.75; S=0.58(2.97) P=0.36; C=1.15(2.97) P=0.54. Adjusted mean(SD) sexually inexperienced at preintervention - A=0.27(2.81) P=0.95; S=0.22(2.81) P=0.84; C=0.30(2.80) P=0.79. Adjusted mean(SD) sexually experienced at preintervention - A=3.03(2.88) P=0.59; S=1.34(2.84) P=0.002; C=3.77(2.87) P=0.01. % reporting consistent condom use - A=41.2(14/34) P=0.38; S=62.5(20/32) P=0.35; C=51.2(21/41) P=0.09. Mean(SD) frequency of condom use - A=3.94(1.28) P=0.02; S=4.15(1.21) P=0.004; C=3.16(1.69) P=0.55. % reporting unprotected sex - A=9.8(16/163) P=0.89; S=5.4(9/167) P=0.16; C=10.8(18/167) P=0.13. % sexually inexperienced at preintervention - A=5.6(7/126) P=0.80; S=3.2(4/124) P=0.52; C=4.8(6/124) P=0.37.

			% sexually experienced at preintervention - A=32.1(9/28) P=0.81; S=9.7(3/31) P=0.06; C=31.6(12/38) P=0.05. Adjusted mean(SD) frequency of unprotected sex - A=0.29(2.25) P=0.88; S=0.17(2.26) P=0.13; C=0.51(2.26) P=0.17. Adjusted mean(SD) sexual inexperience at preintervention - A=0.13(2.23) P=0.99; S=0.07(2.23) P=0.54; C=0.15(2.23) P=0.54. Adjusted mean(SD) sexual experience at preintervention - A=1.09(2.26) P=0.85; S=0.04(2.23) P<0.001; C=1.85(2.38) P<0.001.

Study details	Intervention and population details	Analyses	Results
Kirby et al (1991) NRCT + **Objective:** To evaluate Reducing the Risk, a sexuality education program **Setting:** School **Country:** USA **Funding source:** The Stuart Foundation, The William and Flora Hewlett Foundation and the Division of Research Resources, National Institutes of Health	**Population details** **Inclusion**: Students in 46 classrooms taking a mandatory health education class **Exclusion**: NR **Total** n= 1,033 students **Intervention**, n= 586 (57%) **Comparator,** (43%) **Male** n (%) = 47% **Mean age (range)**: mean 15.3 years, grades 9-12 **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: Reducing the Risk **Focus/aim**: preventing unprotected sex **Programme type**: Sexuality education program **Theoretical base**: Social learning theory, social inoculation theory, cognitive behaviour theory **Key components**: Emphasises that students should avoid unprotected sex through abstinence or using contraception; promotes parent-child discussion. **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: 15 classes over one school year **Other details**: **Comparator**: received normal sex education	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Chi squared, t-tests, logistic regression **Unit of allocation:** Classroom **Unit of analysis:** Group **Time to follow-up**: 6 months and 18 months **Other details:** Primary sample based on students who completed both baseline and 18-month follow-up **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: No significant differences at baseline based on primary sample. **Attrition** **Number of participants completing study**: 758 (73%) by 18 months **Reasons for non-completion**: NR	**Knowledge and understanding** There were substantial gains in contraceptive knowledge in both the treatment and control groups. At 6- and 18-months follow-up, increases in the treatment group were significantly greater than in the control group (both p<0.001). **Attitudes and values** At 6-months follow-up, more control participants believed that more of their peers were having sex, compared to no change among intervention participants (p<0.01). The difference was no longer significant at 18-months follow-up. **Personal and social skills** There were no significant differences in change scores over time, at either follow-up, on the measure of students' intention to use skills for avoiding unprotected intercourse. Intervention participants were more likely that control students to have ever discussed abstinence at 6- and 18-months (p<0.01 and p<0.05, respectively), and birth control at 6-months (p<0.01), with their parents. No difference between groups in communication with parents about pregnancy and STDs. **Health and social outcomes related to alcohol and sexual health** Among students who had never had intercourse, at the 6-month follow-up there was no difference between intervention and control students in the number of students who had initiated intercourse (12% vs. 14%; NS). However, at 18-months, fewer students in the intervention group had initiated intercourse compared to the control group (29% vs. 38%; p<0.05). The results of the logistic regression analysis of the proportions initiating intercourse did not reach significance (p=0.13). There were no statistically significant differences between intervention and control groups in their frequency of sexual intercourse during the previous month at either follow-up. There were no significant differences in contraceptive practice at either follow-up between the intervention and control groups. There was also no significant differences according to whether students had initiated sexual intercourse prior to, or after programme participation.

			Among all students, there were no significant changes over time on either measure of unprotected intercourse at both the 6- and 18-months follow-up. Among students who were sexually inexperienced, at 18 months compared with the control group, fewer intervention students reported engaging in unprotected intercourse (9% vs. 16%, $p<0.05$; NS in logistic regression) or engaging in unprotected intercourse most or all of the time (7% vs. 13%; $p<0.05$; NS in logistic regression). During follow-up, there was no statistically significant difference between the intervention and control groups in the proportion of students who became pregnant or made someone pregnant.

Study details	Intervention and population details	Analyses	Results
LaChausse (2006) RCT (Cluster) - **Objective:** Evaluation of Positive Prevention HIV/STI curriculum **Setting:** School **Country:** USA **Funding source:** NR	**Population details** **Inclusion**: Students in 9th grade classrooms in four high schools; enrolment in mandatory physical science class **Exclusion**: NR **Total** n= 353 students **Intervention**, n= 216 (61.2) **Comparator**, n= 137 (38.8) **Male** n (%) = 74 (42.5); 54 (47.8) **Mean age (range)**: 9th Grade **Ethnicity**: 58.6-62.8% Latino; **Other baseline:** **Intervention details** **Name**: Positive Prevention **Focus/aim**: Increase refusal skills; condom use; peer resistance **Programme type**: HIV/STD prevention **Theoretical base**: Social learning theory; Cognitive behavioural theory **Key components**: Lessons and interactive activities regarding HIV/STDs, risks of early sexual involvement and resisting social pressures for sexual involvement. **Providers/delivers**: Teachers **Length, duration**, **intensity**: 6 lessons, 45 minutes each **Other details**: Teachers participated in a two-day training session. **Comparator**: Education as usual	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Repeated measures ANOVA **Unit of allocation:** Classroom **Unit of analysis:** Individual **Time to follow-up**: 1 month PT; 6 months **Other details:** Students who self-reported (prompt) that they did not answer honestly were excluded from the analyses. **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: NA **Attrition** **Number of participants completing study**: n=174 (80%) intervention; n=113 (82%) control **Reasons for non-completion**: NR	**Knowledge and understanding** No significant difference in knowledge between intervention and control participants regarding HIV infection and AIDS at follow-up. **Attitudes and values** No significant intervention vs. control group differences in positive attitudes towards sexual abstention. No significant intervention vs. control group differences in self-efficacy to abstain from sexual intercourse. At 6-months follow-up, intervention students reported a higher self-efficacy to use condoms (mean [SD]: 7.41 [0.90] vs. 6.74 [1.26]; p=0.001). **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** No significant intervention vs. control group differences in frequency of sexual intercourse or condom use. Interventions participants were significantly less likely to have had sex at the 6 month follow-up than control students (OR = 0.19, 95% CI 0.07, 0.51)

Study details	Intervention and population details	Analyses	Results
Levy et al (1995) RCT (Cluster) + **Objective:** To assess the impact of a school-based AIDS prevention programme on student participation and intention to participate in sexual risk and protective behaviours **Setting:** School + other Family **Country:** USA **Funding source:** NR	**Population details** **Inclusion**: Students attending junior high school in 15 school districts **Exclusion**: NR **Total** n= 2,392 students **Intervention**, n= 1,459 **Comparator**, n= 933 **Male** n (%) = Intervention 51.6%; Control 47.8% **Mean age (range)**: 7th grade **Ethnicity**: (Intervention; Control) African American 64.3%; 56.1% / White 25.2%; 22.5% / Hispanic 6.4%; 16.9% / Other 4.1%; 4.5% **Other baseline:** Ever drank alcohol 48.6%; 48.5% Ever had sexual intercourse 35.8%; 34.3% Ever used condoms 75.7%; 70.3% **Intervention details** **Name**: Youth AIDS Prevention Project **Focus/aim**: To prevent STDs, AIDS/HIV and substance abuse **Programme type**: Skills based **Theoretical base**: Social cognitive theory **Key components**: YAPP classroom intervention, topics included HIV/AIDS, pregnancy and STD prevention and enhancement of decision-making and resistance/negotiation skills; homework assignment; YAPP orientation meeting for parents. Students in the parent-interactive condition, completed assignments with parent/guardian, who were encouraged to attend more intensive parent meetings, to become involved with the school programme, and to discuss HIV/AIDS with their children. **Providers/delivers**: Other **Length, duration**, i**ntensity**: 10 sessions (one day/two weeks) in 7th grade and five additional sessions (one week) in 8th grade. **Other details**: **Comparator**: Delayed treatment; basic AIDS education during intervention phase	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Logistic regression, ordinal level logistic regression **Unit of allocation:** School districts **Unit of analysis:** Individual **Time to follow-up**: PT (end of 8th grade) **Other details:** Parental participation was low so two experimental conditions were combined into a single condition for the analyses. **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Differences in ethnicity **Attrition** **Number of participants completing study**: PT n=1,669 (Intervention 1,001 [32.4%]; Control 668 [29.6%]) **Reasons for non-completion**: Family mobility, student dropout, absenteeism, and missing posttest data	**Knowledge and understanding** NR **Attitudes and values** Students in the intervention and control groups did not differ in their intentions to have sex or use condoms in the next 12 months. Intervention students were significantly more likely to consider using condoms with foam if they planned on being sexually active in the next 12 months (84.6% vs. 62.9%, P<0.001). **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Students in the intervention group were significantly more likely to report ever using condoms with foam (24.3% vs. 14.5%; p<0.01), and had been sexually active marginally less often in the past 30 days than control students (p<0.10). Of students who were sexually active in the last month, intervention students were more likely to have engaged in protective behaviours (NS).

Study details	Intervention and population details	Analyses	Results
Siegel et al (1998) NRCT + **Objective:** To examine the effects of an HIV and sexuality intervention **Setting:** School **Country:** USA **Funding source:** National Institutes of Mental Health, Rockville	**Population details** **Inclusion**: Students in nine urban schools enrolled in health education classes and fluent in English or Spanish. **Exclusion**: NR **Total** n= 3,696 students **Intervention**, n= 2437 (1402 health educator; 1035 peer educator) **Comparator**, n= 1259 (34%) **Male** n (%) = 49% **Mean age (range)** Middle school: ~ 13 yrs High school: ~ 17 yrs **Ethnicity**: 49% African American, 15% Hispanic, 21% White, 15% Other **Other baseline:** ~45% and 72% of the middle and high school students had ever had sexual intercourse. **Intervention details** **Name**: Rochester AIDS Prevention Project **Focus/aim**: AIDS and sexuality education **Programme type**: Abstinence plus **Theoretical base**: Theory of reasoned action **Key components**: Adult health educator and peer educator conditions within intervention group. Curriculum emphasised self esteem and decision making; in-depth discussion and skill-based activities concerning sexuality, STDs, pregnancy, HIV/AIDs. **Providers/delivers**: Teachers or Peers **Length, duration**, i**ntensity**: 10 (high school [10th, 11th or 12th grade]) or 12 (middle school [7th grade]) sessions over 2-7 weeks **Other details**: **Comparator**: Usual health education curriculum	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Repeated-measure ANOVA **Unit of allocation:** Classroom **Unit of analysis:** Individual **Time to follow-up**: immediate PT **Other details:** NA **Baseline comparability** **Groups balanced at baseline:** No **Comments**: some differences at baseline for age, ethnicity, life risk scores and safety intentions between groups **Attrition** **Number of participants completing study**: 2758 (75%) immediate FU **Reasons for non-completion**: Drop out, graduation	**Knowledge and understanding** Significant difference in knowledge with means scores significantly higher in the two intervention groups: middle school females ($p<0.01$); middle school males ($p<0.01$); high school females ($p<0.01$); and high school males ($p<0.0001$) **Attitudes and values** Intervention groups in high school only demonstrated significantly greater behavioural intentions than control students: high school females ($p<0.05$); and high school males ($p<0.01$). **Personal and social skills** Although mean scores for sexual self efficacy were lower in the control group, there were no significant differences between groups. **Health and social outcomes related to alcohol and sexual health** NR

Study details	Intervention and population details	Analyses	Results
Siegel et al (2001); Aten et al (2002) NRCT + **Objective:** To examine the effects of an HIV and sexuality intervention **Setting:** School **Country:** USA **Funding source:** National Institutes of Mental Health, Rockville	**Population details** **Inclusion**: Students in ten urban schools enrolled in health education classes and fluent in English or Spanish. **Exclusion**: NR **Total** n= 4,001 students **Intervention**, n= 1,404 health educator; 1,020 peer educator; 313 regular health educator **Comparator**, n= 1264 **Male** n (%) = **Mean age (range)** Middle school: ~ 13 yrs High school: ~ 17 yrs **Ethnicity**: 50% African American, 16% Hispanic, 20% White, 14% Other **Other baseline** Ever had sex: middle school -18-34% of females and 53-66% males; high school – 60-73% females and 69-82% males **Intervention details** **Name**: Rochester AIDS Prevention Project See Siegel et al (2001) for further Intervention details	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Repeated-measure ANOVA **Unit of allocation:** Classroom **Unit of analysis:** Individual **Time to follow-up**: mean duration 41.2 weeks (range 14.1-80.5 weeks) **Other details:** NA **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Demographics, pre-test scores for major study variables and the self-reported history of sexual intercourse experience were entered as covariates in all analyses. **Attrition** **Number of participants completing study**: 72% of middle school students and 55% of high school students **Reasons for non-completion**: Description not complete	**Knowledge and understanding** Significant difference in knowledge with means scores significantly higher in the two intervention groups at middle school only (females, p<0.001; males, p<0.01). **Attitudes and values** Middle school students indicated more preferable behavioural intentions than controls regarding sex (females, p<0.05; males, p<0.01). No difference among high school students. Self-efficacy was significantly higher in intervention students amongst middle school and high school females (p<0.05 and p<0.01, respectively), but not males. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** For 'some sex'*, with the exception of high school females, there were higher means (indicating lower initiation) in intervention groups than control groups, but this was only significant amongst middle school females (p<0.01). For the measure of 'risky sexual behaviour'**, significance for the intervention was not demonstrated but the means were in the expected direction for intervention groups with controls indicating less safety. Aten et al (2002) examined the effect of the intervention on the initiation of sexual activity among the middle schools students who participated in the study. Compared to controls, males were significantly less likely to have initiated sexual activity in the peer educator group (OR 0.4, p=0.03) and regular teacher group (OR 0.4, p=0.02). Male adult teacher group students reported less initiation of sexual activity than controls, but the finding was not significant (p=0.12). For females, the odds of becoming sexually active were not significantly different from the controls for any of the groups. *initiation and onset of sexual intercourse experience, 5 items (ever carry condoms, ever had sexual intercourse, communication with a partner about sex, have had sex 1-5 times within the past 3 months, and planning ahead to have sex) **engagement in some risky behaviours, 5 items (tried to get pregnant or get a partner pregnant, actual pregnancy involvement, having had sex when the teenager really did not want to, having sex while using alcohol or other drugs, and having had sex >5 times in the past 3 months).

Study details	Intervention and population details	Analyses	Results
Smith (1994) RCT (Individual) - **Objective:** To evaluate the effectiveness of the Teen Incentives Programme **Setting:** School **Country:** USA **Funding source:** NR	**Population details** **Inclusion**: 1989 class of freshman at an inner city high school **Exclusion**: NR **Total** n= 120 **Intervention**, n= 60 **Comparator**, n= 60 **Male** n (%) = 25.8% **Mean age (range)**: mean 15.1 SD 1.05 **Ethnicity**: African American 43.3%; West Indian 30.8%; Hispanic 22.5%; Other 3.3% **Other baseline:** NR **Intervention details** **Name**: Teen Incentives Programme **Focus/aim**: sexual risk reduction **Programme type**: Sexuality and AIDS education **Theoretical base**: NR **Key components**: Interpersonal skills training, career mentor ship; role playing, writing, acting out skits **Providers/delivers**: Other **Length, duration**, i**ntensity**: 6 months, once weekly for 8 wks **Other details**: **Comparator**: waiting list, written materials on contraception and decision making (sexual risk taking behaviour)	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Multiple regression techniques **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: PT **Other details:** None **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: None **Attrition** **Number of participants completing study**: 42 intervention and 53 control students **Reasons for non-completion**: Absent at PT, obtained after schools jobs, unable to attend all weekly sessions	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Students who received the intervention decreased their sexual activity (absolute and relative frequency, both $p<0.05$) and increased their use of contraception ($p<0.05$).

Study details	Intervention and population details	Analyses	Results
Stanton et al (2006) RCT (Cluster) + **Objective:** To assess the effectiveness of Focus on Kids (FOK), a sexual risk reduction intervention **Setting:** School or community **Country:** USA **Funding source:** National Institute of Mental Health	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1,131 students **Intervention**, n= 870 **Comparator**, n= 261 **Male** n (%) = 42.3% **Mean age (range)**: 12-16 years **Ethnicity**: NR **Other baseline:** 21% had engaged in sex during the last 6 months **Intervention details** **Name**: Focus on Kids **Focus/aim**: Sexual risk reduction **Programme type**: Abstinence-plus **Theoretical base**: social cognitive model, protection motivation theory **Key components**: Decision making, goal setting, communication, negotiating, consensual relationships, and information regarding abstinence and safer sex, drugs, alcohol, and drug selling. **Providers/delivers**: Other **Length, duration**, i**ntensity**: 8 sessions; 1 1/2 hrs each; 1-2 day long community **Other details**: **Comparator**: Environmental health intervention	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Not clear **Unit of allocation:** Recruitment group **Unit of analysis:** NR **Time to follow-up**: 3-, 6- and 9-months **Other details:** Participants received the interventions through the school systems(n=709) or through local community organizations (n=422). A proportion of students received a culturally adapted version of the curriculum [n=617 - face-to-face format (n=485) or a long-distance interactive televised format (n=132)]. Other modifications affecting both versions of the programmes included elimination of the condom hunt (participants obtained condoms from the store and clinics) in all communities, and elimination of the condom race (participants placed a condom on a cucumber) in >90% of sites. **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Knowledge higher in intervention group **Attrition** **Number of participants completing study**: 898 (79%); 938 (83%); 904 (80%) **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** FOK participants, compared with control participants, demonstrated significantly higher perceptions of Self Efficacy and Response Efficacy regarding abstinence ($p<0.01$ and $p<0.05$, respectively) at the 6-mth follow-up. No significant difference in any follow-up period for subscales of the Threat Appraisal pathway, perceived Environment, or Intentions to engage in sex, based on intervention status. At 6-mths follow-up, FOK participants compared with control participants demonstrated significantly higher perceptions of Self Efficacy to use condoms ($p<0.05$), and at 3-mths follow-up, lower rates of Response Cost ($p<0.05$). Marginally significant effect of the intervention in that FOK participants perceived fewer Extrinsic Rewards for engaging in unprotected sex than control participants at 6-mths follow-up ($p<0.10$). **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Rates of sexual intercourse during the past 6 months increased over time, but did not differ by intervention status. Condom-use rates declined over time in both groups, and also did not differ by intervention status.

Study details	Intervention and population details	Analyses	Results
Walter and Vaughan (1993) NRCT + **Objective:** To evaluate a teacher-delivered curriculum to improve knowledge and beliefs, self-efficacy in and reduce risk behaviours relating to AIDS **Setting:** School **Country:** USA **Funding source:** National Institute of Mental Health/ National Institute of Drug Abuse	**Population details** **Inclusion**: Ninth and eleventh grade students enrolled in general health education courses in four high schools. **Exclusion**: NR **Total** n= 1,201 students **Intervention**, n= 667 (56%) **Comparator**, n= 534 (44%) **Male** n (%) = 41.5% **Mean age (range)**: mean 15.7 (12-20 yrs) **Ethnicity**: 36.7% Black; 35.4% Hispanic; 27.9% Other (predominately non-Hispanic White or Asian) **Other baseline:** Knowledge and beliefs about AIDS, self-efficacy, sexual behaviour **Intervention details** **Name**: Special AIDS-preventive curriculum **Focus/aim**: preventing AIDS through delaying sex and using condoms **Programme type**: AIDS prevention **Theoretical base**: NR **Key components**: Lessons containing facts about AIDS transmission and prevention; correcting misrepresentations regarding AIDS risk behaviours; teaching of negotiation skills associated with delaying sex and condom use; knowledge and skills around obtaining and using condoms. **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: 6 sessions on successive days **Other details**: Teachers trained to implement the curriculum in an 8-hour in-service training session. **Comparator**: Did not receive AIDS prevention curriculum.	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: t-test **Unit of allocation:** Classroom **Unit of analysis:** Group **Time to follow-up**: 3 months **Other details:** **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Interventions students were slightly older, included more males, Black and Hispanic students; lower knowledge scores, more unfavourable beliefs about preventive actions and having a higher mean risk index level. **Attrition** **Number of participants completing study**: 867 (72%) **Reasons for non-completion**: higher absenteeism at follow up, transfer to other schools and dropout	**Knowledge and understanding** Knowledge relating to AIDS transmission and prevention improved significantly in the intervention group compared to control ($p<0.001$). **Attitudes and values** Significant improvements were found on four of five belief outcomes for the intervention group in comparison to control: perceived susceptibility of acquiring AIDS ($p<0.01$); perceived benefits and barriers for engaging in AIDS preventive behaviour ($p<0.01$ and $p<0.05$, respectively); and perceptions about the commonness of involvement in AIDS prevention ($p<0.01$). No difference in participants' perceptions about the acceptability of involvement of AIDS preventive behaviour. Significant improvements were also found on the measure of self-efficacy, which assessed participants' degree of certainty regarding their ability to success fully perform AIDS-preventive actions ($p<0.01$). **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** The intervention group significantly improved on the behaviour risk index measure* compared to control students ($p<0.01$). The intervention appeared to have the greatest effects on involvement in sexual intercourse with high-risk partners ($p<0.05$), sexual monogamy ($p<0.05$), and condom use ($p<0.05$). Associated with a favourable trend for STD incidence ($p<0.10$) but no effect on sexual abstinence (NS). *involvement in sexual intercourse, consistency of condom use, number of intercourse partners, intercourse with high-risk (i.e. parenteral drug use) partners, and diagnosis of an STD.

Study details	Intervention and population details	Analyses	Results
Weeks et al (1995) RCT (Cluster) + **Objective:** **Setting:** School **Country:** USA **Funding source:** National Institute of Mental Health, Department of Health and Human Services	**Population details** **Inclusion**: **Exclusion**: **Total** n= 2318 **Intervention**, n= 1418 **Comparator**, n= 900 **Male** n (%) = 1176 (51%) **Mean age (range)**: NR Grades 7 + 8 **Ethnicity**: 25% White; 64% African-American; 8% Hispanic; 5% Other **Other baseline:** Behavioural profile: alcohol, cannabis, sex **Intervention details** **Name**: Youth AIDS Prevention Project **Focus/aim**: to prevent STDs, HIV/AIDS and substance abuse **Programme type**: AIDS prevention program **Theoretical base**: Social Cognitive Theory **Key components**: Info about HIV and AIDS and drug abuse and risk behaviours; skill building activities, role playing and group activities. Included non-parent and parent-interactive treatment groups: in parent group students completed homework with parents. **Providers/delivers**: External **Length, duration**, **intensity**: 10 sessions over 2 weeks, 5 booster sessions. **Other details**: **Comparator**: One year younger. Some "may have received basic AIDS education"	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: **Unit of allocation:** School **Unit of analysis:** Organisation/institution **Time to follow-up**: Approx one year (unclear) **Other details:** **Baseline comparability** **Groups balanced at baseline:** True **Comments**: **Attrition** **Number of participants completing study**: 1943 (84%) **Reasons for non-completion**: family mobility, student droup outs, absenteeism	**Knowledge and understanding** **Attitudes and values** **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** Results included with Levy et al, (1995)

Study details	Intervention and population details	Analyses	Results
Wright (1998) NRCT + **Objective:** To evaluate the effects of a theoretically based sexuality/AIDS/ sexually transmitted disease education programme for high school students **Setting:** School **Country:** Canada **Funding source:** NR	**Population details** **Inclusion**: **Exclusion**: **Total** n= 4512 students **Intervention**, n= 2606 **Comparator**, n= 1906 **Male** n (%) = 42.2% **Mean age (range)**: 13-16 yrs **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: Skills for Healthy Relationships **Focus/aim**: Sexual risk reduction **Programme type**: Sexuality and HIV education **Theoretical base**: Theory of reasoned action, theory of planned behaviour, self-efficacy theory **Key components**: Knowledge acquisition, skills development, motivational supports, and attitudes development **Providers/delivers**: Other **Length, duration**, i**ntensity**: 20 hrs, 31 activities **Other details**: **Comparator**: Regular sexuality/HIV/STDs curriculum	**Process details** **Data collection method(s)**: Questionnaire/Survey and focus group interviews **Statistical method(s) used to analyse data**: Repeated measures ANOVA, ANCOVA **Unit of allocation:** School **Unit of analysis:** Individual **Time to follow-up**: PT, grade 10, grade 11 **Other details:** Teachers completed three day in-service training programme. Peer leaders trained by teachers during 3-4 hr training programme **Baseline comparability** **Groups balanced at baseline:** True **Comments**: differed on knowledge, attitudes towards homosexuals and people living with AIDS/HIV, behavioural intentions, and skills/self-efficacy. **Attrition** **Number of participants completing study**: PT:1 I 93%, C 95%; 2 I 97%, C 95%; 3 I 73%, C 79% **Reasons for non-completion**: Absence (1-4%), no parental consent or refusal to participate (1-2%), questionnaires not returned (1-11%)	**Knowledge and understanding** Intervention group students had significantly higher levels of knowledge than control students at PT and both follow-ups (all p<0.0001). **Attitudes and values** Intervention group students reported significantly more positive attitudes towards homosexuals and people living with AIDS/HIV than control group students at PT and both follow-ups (all p<0.0001). Significantly higher levels of intentions to engage in preventive behaviours in the intervention group compared to the control group at PT (p<0.0001) and both follow-ups (p<0.0001 and p<0.01, respectively). **Personal and social skills** Intervention group students reported higher levels of prevention skills than the control group at PT (p<0.0001), and both follow-ups (p<0.01 and p<0.05, respectively). Control group students reported higher levels of self-esteem than intervention group participants at the first follow-up (Grade 10) (p<0.01). Subsequent analyses accounting for programme implementation indicated no group differences on this measure at PT or either follow-up. **Health and social outcomes related to alcohol and sexual health** There were no significant differences between the intervention and control group students on any of the sexual behaviour outcome measures. When the degree of programme implementation was taken into account, control group students reported higher levels of sexual experience than 'greater' implementers in the intervention group at PT, the second follow-up (Grade 11) (both p<0.01). No significant difference at the second follow-up (Grade 10). The intervention programme did not have a significant impact on alcohol use.

Study details	Intervention and population details	Analyses	Results
Zimmerman et al (2008) RCT (Cluster) + **Objective:** to evaluate a modified version of Reducing the Risk against the traditional RTR curriculum and control **Setting:** School **Country:** USA **Funding source:** National Institute on Alcoholism and Alcohol Abuse	**Population details** **Inclusion**: Seventeen schools; taught health education during 9th or 10th grade; had at least 200 9th grade students; racially diverse. **Exclusion**: NR **Total** n= 2,647 students* **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = 46.9% **Mean age (range)**: 13-16 years, mode 14 years **Ethnicity**: Control: White 50%, Black 36%, Other 14%; RTR: White 54%, Black 28%, Other 17%; Modified RTR: White 45%, Black 41%, Other 14% **Other baseline:** Educational aspiration **Intervention details** **Name**: Reducing the Risk **Focus/aim**: Changing the behaviour of high sensation impulsive youth **Programme type**: HIV, alcohol and pregnancy prevention **Theoretical base**: NR **Key components**: Modified RTR curriculum to include videos with music, using peer facilitators, young people with HIV as presenters, role playing, more games and prizes, eliminated parent discussion activities **Providers/delivers**: Teacher and Peer led **Length, duration**, i**ntensity**: 16-17 sessions **Other details**: **Comparator**: Standard, non-skills based HIV prevention curriculum	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Logistic regression, hierarchical regression **Unit of allocation:** School **Unit of analysis:** School **Time to follow-up**: end of 9th grade (PT) and end of 10th grade (1 year) **Other details:** Only students who completed follow-up surveys were included in the analyses. **Baseline comparability** **Groups balanced at baseline:** No **Comments**: some significant differences in gender, ethnicity and education aspiration between groups **Attrition** **Number of participants completing study**: 76% completed end of 9th grade follow-up, 52% completed end of 10th grade follow-up* **Reasons for non-completion**: Authors identified that school drop dropout played a major role in attrition	**Knowledge and understanding** No significant differences in knowledge between intervention and control students at the end of 10th grade. **Attitudes and values** No significant differences between intervention and control students in perceived peer sexual activity, attitudes about waiting to have sex, measures of self-efficacy (refusal, condom and situational) or response to sexual pressure at the end of 10th grade. **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** No significant differences found between groups on behavioural outcomes including frequency of condom use, condom use at last sex, alcohol use at last sex, and frequency of alcohol use with sex (data not presented in article). Control participants had significantly greater odds of initiating sexual activity than participants in both intervention groups combined (OR 2.42; $p<0.05$, analysis at individual level).

SRE: HIV and sexual risk reduction programmes

Study details	Intervention and population details	Analyses	Results
Borgia et al (2005) RCT (Cluster) + **Objective:** To evaluate the effectiveness of peer education when compared to teacher-led curricula in AIDS prevention programs conducted in schools in Rome, Italy. **Setting:** School NA **Country:** Italy **Funding source:** Partial funding European Commission, PROJECT n	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1697 **Intervention**, n= 613 (47.3%) **Comparator**, n= 682 (52.7%) **Male** n (%) = Int=336 (54.8%); Cont=331 (48.5%) **Mean age (range)**: median 18yrs **Ethnicity**: NR **Other baseline:** Type of school, socioeconomic level, sexually active, alcohol consumption, lifetime drug use. **Intervention details** **Name**: NR **Focus/aim**: AIDS/HIV **Programme type**: knowledge, social influences, decision making, self-efficacy, abolish prejudice and stigmatization. **Theoretical base**: Social Learning Theory **Key components**: increase knowledge of HIV, address social influences and group norms, improve decision making, communication and negotiation skills and related self-efficacy, place risks related to specific contexts and behaviour in proper dimension and abolish prejudice and stigma towards persons with AIDS. **Providers/delivers**: Peer led **Length, duration**, **intensity**: 5 sessions, 10hrs. **Other details**: **Comparator**: 5 sessions, 10hrs.	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Linear regression. Ordinal regression with logistic link-function. **Unit of allocation:** School **Unit of analysis:** Group **Time to follow-up**: 5 months. **Other details:** intervention-control **Baseline comparability** **Groups balanced at baseline:** **Comments**: randomised schools not students - took differences into account in outcome evaluation through multiple regression models. **Attrition** **Number of participants completing study**: 1295. Intervention n=613 (80%); Control n=613 (73%) **Reasons for non-completion**: NR - lost to follow up	**Knowledge and understanding** Pre and Post test scores, mean(SD). Teacher (T); Peer-led (L): Knowledge - Tpre-40.6(21.1), Tpost-55.2(24.1); Lpre-43.0(20.6), Lpost-63.7(25.6). Knowledge scores (post-test minus pre-test total) random effect linear regression. Peer vs Teacher, Coefficients (CI's): Intervention - 6.7 (1.9; 11.5). **Attitudes and values** Pre and Post test scores, mean (SD). Teacher (T); Peer-led (L): Attitudes - Tpre-42.0(26.0), Tpost-48.3(26.7); Lpre-45.6(24.9), Lpost-49.2(25.6). Risk perception - Tpre-59.7(16.4), Tpost-64.3(18.0); Lpre-59.0(16.2), Lpost-63.3(17.1). **Personal and social skills** Pre and Post test scores, mean (SD). Teacher (T); Peer-led (L): Prevention skills - Tpre-69.1(14.4), Tpost-70.6(15.3); Lpre-68.3(15.0), Lpost-69.9(15.3). **Health and social outcomes related to alcohol and sexual health** Number of sexual partners in the 3 months preceding post-test in those students sexually active at baseline. Peer vs Teacher. Ordinal regress; Coefficients (CI's): Intervention - -0.3(-0.6; 0.1). Frequency of condom use in the 3 months preceding post-test within sex active students at baseline. Peer vs Teacher. Ordinal regression, Coefficients (CI's) - 0.1 (-0.4; 0.5)

Study details	Intervention and population details	Analyses	Results
Coyle et al (2006) RCT (Cluster) ++ **Objective:** To evaluate a curriculum to reduce sexual risk behaviours associated with HIV, STDs and unintended pregnancy **Setting:** School **Country:** USA **Funding source:** Centres for Disease Control and Prevention	**Population details** **Inclusion**: Students in 24 alternative schools located in four large urban counties **Exclusion**: NR **Total** n= 24 schools (988 students) **Intervention**, n= 13 schools (597 [60%]) **Comparator**, n= 11 schools (391 [40%]) **Male** n (%) = 619 (63%) **Mean age (range)**: 14-18 years **Ethnicity**: 28% African American, 15% Asian American, 29% Hispanic/Latino, 12% White, 16% Other **Other baseline:** (intervention/control) 82%/85% ever had sexual intercourse; 70%/76% had sexual intercourse in past 3 months; 61%/68% used a condom at last intercourse **Intervention details** **Name**: All4You! **Focus/aim**: To reduce unprotected sex **Programme type**: Sex education **Theoretical base**: Social development theory, social cognitive theory, theory of planned behaviour, theory of reasoned action **Key components**: Skills based HIV/STD and pregnancy prevention curriculum; service-learning activities involving visits to volunteer sites **Providers/delivers**: Other **Length, duration**, i**ntensity**: 14 sessions, 26 hours (9 classroom lessons, 5 visits to volunteer sites) **Other details**: Lessons were drawn from Be Proud, Be Responsible and Safer Choices **Comparator**: Continued typical activities related to HIV and pregnancy prevention	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Linear and logistic multilevel models; Poisson or negative binomial multilevel models **Unit of allocation:** Schools **Unit of analysis:** Group **Time to follow-up**: PT; 6, 12 and 18 months **Other details:** **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Intervention students were slightly older; baseline differences controlled for in analyses **Attrition** **Number of participants completing study**: 76% PT, 73% 6 months, 62% 12 months, 56% 18 months **Reasons for non-completion**: Included death, jail sentences, no home address	**Knowledge and understanding** For overall outcomes across all follow ups, intervention students scored significantly higher on HIV and condom knowledge at the 6- and 18-months follow-up (p<0.01) than control students, but not at the 12-months follow-up. **Attitudes and values** Control students scored significantly higher on attitudes about condoms protecting against pregnancy and beliefs about using condoms. Control students scored significantly higher on perceived efficacy to get and use condoms. **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** At 6-month follow-up, intervention group were significantly less likely to have had sex without a condom in the past 3 months (mean difference [SE] -1.09 [0.36]; p=0.002) and were more likely to use condoms during last sex than the control group. No difference at 12 or 18 months. The intervention group were more likely than the control group to have used condoms at last intercourse at 6-months (OR 2.12; 95% CI 1.24, 3.56; p=0.006) but effects diminished by 12 and 18 months. No statistically significant intervention group differences in the number of unprotected sexual partners or reported use of an effective method of pregnancy prevention at last intercourse. At 6-months, intervention students reported unprotected intercourse fewer time in the past 3 months with steady partners than control students (mean difference [SE] -0.28 [0.11]; p=0.01) and a trend toward having intercourse without a condom in the previous 3 months fewer times with non–steady partners (mean

			difference [SE] -0.07 [0.04]; p=0.08). No difference at 12 or 18 months. Also at 6 months, the intervention reduced the frequency of intercourse among intervention students compared to control students (mean difference [SE] -2.72 [1.33]; p=0.04). No statistically significant differences between intervention and control students in the number of steady or non-steady partners with whom students had unprotected intercourse during the previous 3 months. In addition, no intervention effects on the following outcomes: use of alcohol and drugs before intercourse previous 3 months, sexual initiation, number of times tested for HIV and other STDs, pregnancy since baseline.

Study details	Intervention and population details	Analyses	Results
Fisher et al (2002) NRCT ++ **Objective:** Effects of 3 theoretically grounded, school-based HIV prevention interventions on inner-city minority high school students' levels of HIV prevention information, motivation, behavioural skills, and behaviour **Setting:** School **Country:** USA **Funding source:** NIMH	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1577 **Intervention**, n= classroom 310 (19.7); Peer 381 (24.2; Combined 296 **Comparator**, n= 589 (37.3) **Male** n (%) = 37% **Mean age (range)**: mean 14.8, range 13-19 **Ethnicity**: 61% African American 28% Hispanic, 11% White **Other baseline:** Fifty-four percent of participants reported living with their mothers only, 32% with both parents, and the remaining participants lived with some combination of natural and step-parents. **Intervention details** **Name**: NR - Combined peer + curriculum **Focus/aim**: HIV prevention **Programme type**: HIV prevention **Theoretical base**: information-motivation-behavioural skills (IMB) model **Key components**: Information, motivation and behavioural skills **Providers/delivers**: Other **Length, duration**, i**ntensity**: 5 lessons **Other details**: **Comparator**: Peer only, Curriculum only, education as normal	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: ITT analysis, **Unit of allocation:** School **Unit of analysis:** Individual **Time to follow-up**: +12 months **Other details:** **Baseline comparability** **Groups balanced at baseline:** No **Comments**: Controlled in analyses **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**: NR	**Knowledge and understanding** In sexually inexperienced individuals: Significant increase in classroom and combined intervention, but not peer, for information ($p < 0.001$) In sexually experienced individuals: Significant increase for information in classroom, peer, and combined intervention ($p < 0.01$ - 0.001) **Attitudes and values** In sexually inexperienced individuals: Significant improvement in classroom and combined intervention, but not peer, for HIV prevention attitudes ($p < 0.001$); Significant increase in norms and intentions for combined group only (both $p < 0.05$) In sexually experienced individuals: Significant improvement in HIV prevention attitudes in Peer and Combined groups ($p < 0.01$) Significant increase in norms for classroom group ($p < 0.05$) **Personal and social skills** In sexually inexperienced individuals: Significant increase in behavioural skills in combined group only ($p < 0.01$) In sexually experienced individuals: Significant increase in behavioural skills for combined group only ($p < 0.05$) **Health and social outcomes related to alcohol and sexual health** Significant increases in condom use in previous 3 months in the combined intervention ($B = .17$, $p < 0.05$) and in the peer intervention ($B = .16$, $p<0 .05$) compared with standard-of care controls. Classroom based intervention resulted in increased condom use for the year following completion of the intervention, in comparison with controls ($B = .19$, $p < .01$). For the year following completion of the intervention, effects of the combined intervention ($B= .05$, ns) and the peer intervention ($B = .05$, ns) were no longer in evidence.

Study details	Intervention and population details	Analyses	Results
Kvalem et al (1996) RCT (Cluster) - **Objective:** To evaluate an intervention based on cognitive social learning theory and social influence theory and designed to prevent sexually transmitted diseases and unwanted pregnancies. **Setting:** School **Country:** Norway **Funding source:**	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 2,088 pupils; 1,085 pre-test **Intervention**, n= 494; 284 pre-test **Comparator**, n= 1594; 801 pre-test **Male** n (%) = 50% **Mean age (range)**: NR **Ethnicity**: NR **Other baseline:** Intervention/Control: Had sexual intercourse 50%/43%; >2 sexual partners 32%/35%; used nothing at first intercourse 35%/43%; used nothing at most recent intercourse 18%;31% **Intervention details** **Name**: NR **Focus/aim**: Prevent STDs and pregnancies **Programme type**: AIDS and sexuality education **Theoretical base**: cognitive social learning theory, social influence theory **Key components**: Peer educators chose a topic to investigate and discuss in depth prior to presentation; Topic of choice delivered to intervention students **Providers/delivers**: Other **Length, duration**, i**ntensity**: 10-14 hours over 2 consecutive days **Other details**: **Comparator**:	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Logistic regression analyses **Unit of allocation:** Group: Classes **Unit of analysis:** Individual **Time to follow-up**: 6 months, 1 year **Other details:** Teachers received 8 hours of training by project leaders. Some teachers collaborated with the school nurse to deliver the programme. **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: **Attrition** **Number of participants completing study**: 227 (80%); 204 (72%) / 563 (70%); 522 (65%) **Reasons for non-completion**: NR; students who were retained tended to report less sexual involvement than those lost to follow-up	**Knowledge and understanding** **Attitudes and values** **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** Pre-tested: 30% (52/176) of the intervention group and 28% (174/612) of the control group reported first intercourse between baseline and one year after intervention (NS for comparison). For students who had had intercourse before intervention, at 6 months follow-up 70% (51/73) of intervention students reported condom use at most recent intercourse compared to 51% (76/148) of control students (p<0.01 for comparison; Control vs. Intervention (logistic regression): OR 0.31; p=0.003). No difference on this outcome at 12 months follow-up.

Study details	Intervention and population details	Analyses	Results
Larsson et al (2006) NRCT + **Objective:** To evaluate an intervention aimed at improving knowledge of, attitudes to, and practices regarding condoms and emergency contraception (ECP) among Swedish high school students. **Setting:** School **Country:** Sweden **Funding source:** Uppsala County Council, the Family Planning Fund of Uppsala and the Swedish National Institute of Public Health	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 8 schools; 461 students **Intervention**, n= 4 schools; 282 students **Comparator**, n= 4 schools; 179 students **Male** n (%) = I 117 (49%); C 68 (46%) **Mean age (range)**: mean 17.25 years (range 16-20 yrs) **Ethnicity**: NR **Other baseline:** 77% reported having had sexual intercourse **Intervention details** **Name**: NR **Focus/aim**: Improving knowledge of, attitudes to, and practices of condoms and ECP **Programme type**: Contraception **Theoretical base**: NR **Key components**: One 20-minute lesson about the emergency contraceptive pill (nurse/midwife); one session of three 40-minute lessons by educators from the Love Emergency (medical students) within one month after the first lesson focused on attitudes and values towards different contraceptive methods, including rehearsal of condom skills; VIP card for free condoms; telephone number to access individual counseling from nurse/midwife. **Providers/delivers**: Other **Length, duration**, i**ntensity**: 1 20-min lesson; 3 40-min lessons **Other details**: **Comparator**: No intervention	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Fischer's exact test and the chi-squared test. Differences considered significant if p<0.05. **Unit of allocation:** School **Unit of analysis:** Individual **Time to follow-up**: 1 year from pre-test **Other details:** **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: **Attrition** **Number of participants completing study**: 390 pre-test; 367 posttest **Reasons for non-completion**: NR	**Knowledge and understanding** Knowledge of ECP: The difference in change over time between the intervention and control groups was significant with regard to the effectiveness of ECP taken on the third day after unprotected intercourse, with greater improvement in the intervention group (p<0.01). NS on other measures, effectiveness of ECP on the first day and side effects. **Attitudes and values** Students' attitudes towards condoms remained mostly stable over time and the intervention had no impact on these attitudes. **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** Previous and estimated future use of condoms and ECP: The use of condoms and the perceived self-efficacy regarding discussing and buying condoms increased in the IG but remained stable in the CG (NS). The use of ECP had not changed over time. Ever used condoms Pre-test: Intervention 64%; Control 69% Posttest: Intervention 79%; Control 69%; p=0.01 Ever used ECP Pre-test: Intervention 25%; Control 30% Posttest: Intervention 28%; Control 31%; p=0.31

Study details	Intervention and population details	Analyses	Results
Lemieux et al (2008) CBA - **Objective:** Evaluation of music based HIV prevention amongst urban adolescents **Setting:** Inner city high schools **Country:** USA **Funding source:** National Institutes of Mental Health, Society for the Psychological Study of Social Issues, Concerned Citizens for Humanity of Hartford, Connecticut	**Population details** **Inclusion**: Students from health classes in three public inner city high schools **Exclusion**: NR **Total** n= 3 schools (422 students) **Intervention**, n= 1 school **Comparator**, n= 2 schools **Male** n (%) = 51% **Mean age (range)**: 16 years **Ethnicity**: 43% Latino, 37% African American, 4 % white **Other baseline:** 53% reported past sexual intercourse **Intervention details** **Name**: Students Working Against Aids Together **Focus/aim**: HIV prevention motivation **Programme type**: Music based HIV prevention **Theoretical base**: Information-Motivation-Behavioural Skills Model; Natural Opinion Leader Model **Key components**: Creation, recording and distribution of HIV prevention themed music and promotional materials; in-class presentations **Providers/delivers**: Peer leaders (n=6) **Length, duration**, i**ntensity**: Four months preparation of CD; ~1 month distribution **Other details**: NR **Comparator**: No intervention	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Repeated measures ANOVA **Unit of allocation:** School health classes **Unit of analysis:** Individual **Time to follow-up**: 3 months from CD release **Other details:** NR **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: NR **Attrition** **Number of participants completing study**: 306 (72.5%; 166 intervention students) **Reasons for non-completion**: Did not complete follow up questionnaire	**Knowledge and understanding** NR **Attitudes and values** Simple effects tests indicated a statistically significant decrease in favourability of attitudes toward condom use in the control condition ($p<0.05$), but no change in the intervention condition. Marginally significant interaction between time and condition on participants' perceived social normative support for condom use ($p=0.07$); increase in perceived support among intervention group, no change in the control group. In further analyses, among never sexually active female participants, control, there was a significant decrease in perceived social normative support for abstinence among control but not intervention participants. Non significant increase in perceived vulnerability to HIV in the intervention group ($p=0.06$); no change in the control group. Non significant increase in intentions to use condoms in treatment group ($p=0.08$); no change in the control group. **Personal and social skills** Significant increase in HIV prevention behavioural skills in the intervention group compared to the control group ($p<0.02$). **Health and social outcomes related to alcohol and sexual health** Significant increase in the use of condoms ($p < 0.05$) among participants in the intervention group, and decreases among the control participants; Increase in rate of HIV testing in sexual experienced treatment group participants. Sexually active participants in the treatment condition were more likely to obtain an HIV test than were sexually active participants in the control condition ($p<0.01$).

Study details	Intervention and population details	Analyses	Results
Mitchell-DiCenso et al (1997) RCT (Cluster) + **Objective:** Evaluate effectiveness of school based sex education programme **Setting:** School **Country:** USA **Funding source:** NR	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 3975 **Intervention**, n= 2309 (58.1) **Comparator**, n= 1666 (41.9) **Male** n (%) = 49.1; 46.9% **Mean age (range)**: 12.6; 12.7 **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: McMasters teen programme **Focus/aim**: Accurate information about reproductive system and adolescent development; relationship strategies; emotional communication skills; sexual problem solving skills **Programme type**: Educational curriculum and skills training **Theoretical base**: Cognitive-behavioural model **Key components**: Group discussions, films **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: 10 x 1 hour sessions **Other details**: NR **Comparator**: Didactic sex education as usual	**Process details** **Data collection method(s)**: Questionnaire/Survey Some measures previously validated **Statistical method(s) used to analyse data**: Chi square, t-test, survival analysis , multiple regression controlled for clustering effects **Unit of allocation:** School **Unit of analysis:** Individual **Time to follow-up**: =1, 2, 3, 4 years **Other details:** **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: **Attrition** **Number of participants completing study**: 44.1% completed final post-test **Reasons for non-completion**: NR	**Knowledge and understanding** **Attitudes and values** **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** No significant difference in cumulative survival curve till first intercourse or first pregnancy. + 2 years more males reported always using contraception (difference 8.9%; 95% CI=0.4, 17.4).

Study details	Intervention and population details	Analyses	Results
Roberto et al (2007) RCT (Cluster) + **Objective:** Evaluation of a computer- and Internet-based health communication intervention designed to prevent pregnancy, STDs and HIV in rural adolescents. **Setting:** School **Country:** USA **Funding source:** National Institute of Mental Health	**Population details** **Inclusion**: Students at two rural high schools **Exclusion**: NR **Total** n= 402 students **Intervention**, n= 181 **Comparator**, n= 221 **Male** n (%): Intervention 41.7%; Control 44.9% **Mean age (range)**: 10th grade; age NR **Ethnicity**: 97% European American **Other baseline:** NA **Intervention details** **Name**: NR **Focus/aim**: Pregnancy, STD, and HIV prevention **Programme type**: Computer-based **Theoretical base**: Extended parallel process model **Key components**: Six computer-based activities completed outside of class time. **Providers/delivers**: Other **Length, duration**, i**ntensity**: 7 wks **Other details**: **Comparator**: No intervention	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Repeated-measures ANOVA **Unit of allocation:** School **Unit of analysis:** Organisation/institution **Time to follow-up**: PT, 10 weeks **Other details:** NR **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: NR **Attrition** **Number of participants completing study**: Intervention 85% and Control 87% students completed follow-up **Reasons for non-completion**: NR	**Knowledge and understanding** Intervention school had greater knowledge (mean 7.96 vs. 6.60; p<0.001) than the control school. **Attitudes and values** Intervention school had more favourable attitudes toward waiting to have sex (mean 3.71 vs. 3.44; p<0.05), and greater situational self-efficacy (mean 4.05 vs. 3.64; p<0.05) than the control school. **Personal and social skills** Intervention school had greater condom negotiation self-efficacy (mean 4.44 vs. 3.98; p<0.05) than the control school. The control school scored higher than the experimental school on the susceptibility measure (mean 1.63 vs. 1.86; p<0.01). **Health and social outcomes related to alcohol and sexual health** Students in the experimental school were significantly less likely than those in the control school to initiate sexual activity between the pretest and the post-test (18% vs. 8%; p < 0.01; OR 2.93). There was no difference in the number of sexual partners between the intervention and control schools (mean 1.07 vs. 1.64; NS). Among individuals who were sexually active in the last 4 months, there was no impact of the intervention on condom use at last intercourse.

Study details	Intervention and population details	Analyses	Results
Schaalma et al (1996) RCT (Cluster) + **Objective:** To evaluate the effects of an AIDS/STD curriculum for 9th- and 10th-grade students in the Netherlands. **Setting:** School **Country:** Netherlands **Funding source:** Dutch Ministry of Welfare, Health and Cultural Affairs	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 3,142 students **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = NR **Mean age (range)**: Grades 9 and 10 **Ethnicity**: NR **Other baseline:** 22% reported having had sexual intercourse **Intervention details** **Name**: AIDS/STD prevention curriculum **Focus/aim**: Sexual risk reduction **Programme type**: AIDS and sexuality education **Theoretical base**: (social) learning theory, communication theory, elaboration likelihood, risk perception, outcome expectancies, discrepancy, affective response, social comparison, social/psychological inoculation **Key components**: Knowledge about AIDS, STDs, transmission, prevention, and risk perception; attitudes toward safe sex in general and condom use; values, social influences, and communication skills regarding the prevention of AIDS and STDs; self-efficacy beliefs regarding negotiating skills and practicing condom use. **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: 4 lessons, ~1 hour each **Other details**: **Comparator**: "Usual treatment"	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: hierarchical linear model **Unit of allocation:** School: 51 schools **Unit of analysis:** Organisation/institution **Time to follow-up**: 4-8 weeks post-intervention **Other details:** Teachers participated in one day in-service training session **Baseline comparability** **Groups balanced at baseline:** **Comments**: NR **Attrition** **Number of participants completing study**: 2,430 (77%) **Reasons for non-completion**: Primarily due to absenteeism, transfer to other schools, or missing data on matching variables	**Knowledge and understanding** In comparison with students in the control group, students in the intervention group showed a higher level of knowledge at follow-up assessment (mean score: 11.9 vs. 10.5; p<0.001). **Attitudes and values** In comparison with students in the control group, students in the intervention group reported statistically significant (1) higher risk appraisals (mean score: 9.7 vs. 9.4; p<0.005), (2) more positive attitudes (mean score: 12.1 vs. 8.6; p<0.001), (3) more positive perceptions of subjective norms (mean score: 18.8 vs. 15.8; p<0.01) and peer behaviour (mean score: 3.5 vs. 2.8; p<0.05), (4) higher self-efficacy beliefs (mean score: 18.4 vs. 16.7; p<0.05) and (5) more positive intentions regarding using condoms consistently (mean score: 18.9 vs. 17.1; p<0.01). **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** There was no difference in the risk index between intervention and control students (weighted follow-up scores: Intervention 0.33 vs. Control 0.36; NS).

Study details	Intervention and population details	Analyses	Results
Traeen (2003) RCT (Cluster) + **Objective:** Evaluate the effect of an intervention designed to prevent unwanted pregnancy in adolescents. **Setting:** School **Country:** Norway **Funding source:** Norwegian Research Council.	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1183 **Intervention**, n= Pre-test + Intervention=416; Pre-test=197 **Comparator**, n= 174 **Male** n (%) = NR **Mean age (range)**: 15-16yrs **Ethnicity**: NR **Other baseline:** use of alcohol/drugs, motives for intercourse, self-perception, sex knowledge and attitudes towards sexuality. **Intervention details** **Name**: NR **Focus/aim**: Safe sex and unwanted pregnancy reduction **Programme type**: social skills and life skills plus knowledge based. **Theoretical base**: Social constructionism, social learning theory and sexual script theory. **Key components**: female readers - learning to know and enjoy ones own sexuality, to males learning to talk about feelings and give all readers insight into how people experience their sexuality and focus the positive sexuality. Also make better users of contraception. **Providers/delivers**: Teachers **Length, duration**, **intensity**: NR **Other details**: NA **Comparator**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: chi-squared, Odds ratios. **Unit of allocation:** School **Unit of analysis:** Group **Time to follow-up**: 6-7mths; 1-2yrs. **Other details:** NA **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: NR **Attrition** **Number of participants completing study**: P+I=208(50.5);P=114(58.2);I=230(58.7);C=110(63.6) **Reasons for non-completion**: refusal to participate	**Knowledge and understanding** **Attitudes and values** **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** % Post-test 1 use of contraception those who had 1st sex between pre + posttest1 (N=59). Pre-test + Intervention (41);Pre-test(18): Use of Contraception in First Sex:- Used some contraception - PI=75.6; P=50.0, p=0.053. No contraception used - PI=22.0, P=16.7, p=0.642. Interrupted - PI=4.9; P=22.2 p=0.042. Condoms before orgasm - PI=7.3; P=5.6 p=0.804. Condoms - PI=68.3; P=33.3, p=0.012. Hormonal/Oral contraception - PI=4.9; P=22.2, p=0.042. Emergency contraception - PI+4.9; P=0 p=0.340. Use of contraception in most recent sex:- Used some contraception - PI=63.4; P=38.9 p=0.081. No contraception used - PI=9.8, P=16.7 p=0.450. Interrupted - PI=4.9; P=27.8 p=0.012. Condoms before orgasm - PI+2.4; P=0 p=0.504. Condoms -PI=53.7; P=38.9 p=0.296. Hormonal/Oral contraception - PI=22.0; P=11.1 p=0.325. Emergency contraception - PI=9.8; P=16.7 p=0.450. Use of contraception during most recent sex at Post-test 1 (N=323),%(OR; CI; p-value): PI(N=107)=59.3(1.00;NR;0.218), I(N=105)=57.1(0.78;0.42-1.43;0.419),P(N=45)=52.2(0.63;0.29-1.37;0.246),C(N=64)=67.2(1.46;0.72-2.95;0.295).

Study details	Intervention and population details	Analyses	Results
Workman et al (1996) RCT (Individual) - **Objective:** To examine the efficacy of a school-based HIVIAIDS prevention intervention for African-American and Hispanic adolescent females. **Setting:** School **Country:** USA **Funding source:** NR	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 60 **Intervention**, n= 30 **Comparator**, n= 30 **Male** n (%) = 0% **Mean age (range)**: mean 15 years (range 14-17) **Ethnicity**: 43.3% Afr Am; 56.7% Hispanic **Other baseline:** NR **Intervention details** **Name**: NR **Focus/aim**: Sexual risk reduction **Programme type**: Cognitive-behavioural HIVIAIDS prevention intervention **Theoretical base**: NR **Key components**: Small group sessions (8-10 students) on sexual-social values clarification, sexual-social decision making, reproductive-sexual anatomy and physiology, birth control methods, STDs, AIDS myths and facts, and sexual assertiveness and communication skills **Providers/delivers**: Other **Length, duration**, i**ntensity**: 12 weeks, 30-min/week **Other details**: **Comparator**: Womanhood development, attention- placebo control condition not related to sexual risk reduction	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: Repeated measures MANOVA **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: PT (1 week) **Other details:** NR **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: NA **Attrition** **Number of participants completing study**: 51 students not included in analyses **Reasons for non-completion**: Missing data or non-attendance at 90% or more of the sessions	**Knowledge and understanding** Intervention and control group differed significantly at post-assessment in level of AIDS knowledge (p given but not clear); significant increase in AIDS-related knowledge in the intervention group (F,(156) = 7.59, p<.01: Scheffe's post hoc comparison) but not in the control group at PT. **Attitudes and values** **Personal and social skills** No significant intervention effects on sexual and drug-related AIDS preventive behaviours (e.g. not having sex, avoiding injection drug use), sexual decision-making, sexual assertiveness or level of comfort discussing AIDS preventive behaviours. **Health and social outcomes related to alcohol and sexual health**

SRE: Other school-based approaches

Study details	Intervention and population details	Analyses	Results
Lederman, Chan and Roberts-Gray (2004) NRCT + **Objective:** Compare and evaluate differences in sexual risk attitudes and intentions of youths after participating in social learning interventions and attention control programmes with parents or no prevention education programme. **Setting:** Middle schools in Southeast Texas. **Country:** USA **Funding source:** none reported	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 804 **Intervention**, n= 170 **Comparator**, n= 634 **Male** n (%) = 361.8 (45%) **Mean age (range)**: 11-15yrs **Ethnicity**: African/American - 26%, Hispanic/Latino/Mexican - 38%, White non-Hispanic - 26% and Other - 10%. **Other baseline:** School Grades e.g. A's, B's; expectance to attend college. **Intervention details** **Name**: **Focus/aim**: Increased positive attitudes toward resposible sexual behaviour, increase or maintain high level of discourse with parents and express more definite intentions to postpone sex. **Programme type**: Social learning and teaching programme **Theoretical base**: Social learning **Key components**: Abstinence and safe-sex info, family interaction. **Providers/delivers**: Other **Length, duration**, i**ntensity**: 4 weeks, 2.5hrs/wk. Booster sessions 1x semester **Other details**: **Comparator**: no description	**Process details** **Data collection method(s)**: Questonnaire/Survey **Statistical method(s) used to analyse data**: Regression analyses. **Unit of allocation:** Individual **Unit of analysis:** Group **Time to follow-up**: Pre-program - 3-6mths before intervention; post-program - 3-6mths after the intervention. **Other details:** **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: Author note - Generally comparable at baseline **Attrition** **Number of participants completing study**: 804, no drop-out rate/figures reported. **Reasons for non-completion**: NR	**Knowledge and understanding** NR **Attitudes and values** Intercorrelations Postprogram (used records for 632 to 649 youth) - Attitudes about engaging in sexual risk behaviour-Intentions with regard to having sex (r=0.59). Attitudes-Expectancies re: consequences of sex risk behaviour (r=0.02). Perception of parents disapproval of risk behaviours-Intentions to have sex (r=0.19). Perception of parents-Expectancies regarding consequences (r=0.08). Perception of parents-Attitudes about engaging in sexual risk behaviours (r=0.29). F values for Linear Models Postprogram (degrees of freedom) - Program(2)-Intentions with regard to having sex (553) 4.94, P<0.01. Program(2) –Total (560) 4.34, P<0.05. **Personal and social skills** Intercorrelations Postprogram (used records for 632 to 649 youth) - Discourse with parents about sexual health topics-Intentions with regard to having sex (r=0.10). Discourse with parents about sexual health topics-Expectancies regarding consequences of sexual risk behaviours (r=0.04). Discourse with parents about sexual health topics-Attitudes about engaging in sexual risk behaviour (r=0.10). Discourse with parents about sexual health topics-Perceptions of parents' disapproval of risk behaviours (r=0.04). **Health and social outcomes related to alcohol and sexual health** NR

Study details	Intervention and population details	Analyses	Results
Lewis et al (1999) Other: "Longitudinal Case Study" - **Objective:** to examine the effects of a school/community partnership to reduce risk of adolescent pregnancy in a Midwestern military community **Setting:** School + community **Country:** USA **Funding source:** Kansas Health Foundation grant	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= NR **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = NR **Mean age (range)**: Grades 9-12 **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: Reducing the Risk **Focus/aim**: reducing risk factors and enhancing protective factors associated with adolescent pregnancy **Programme type**: pregnancy prevention program **Theoretical base**: NR **Key components**: comprehensive sexuality education curriculum; increased access to health services and contraceptives; media efforts to increase awareness; peer education and support; supervised activities; programs in the faith community; community lineages **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: K-12th Grade Curriculum **Other details**: **Comparator**: counties without the intervention	**Process details** **Data collection method(s)**: Questionnaire/Survey Also estimated pregnancy rates in 14-17 yr old females; interviews **Statistical method(s) used to analyse data**: Chi Square **Unit of allocation:** Area: counties **Unit of analysis:** Community/environment **Time to follow-up**: Three years **Other details:** **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: NR **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**: NA	**Knowledge and understanding** **Attitudes and values** **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** From 1994-1997 sexual activity decreased significantly from 63% to 47% [x2(3)=51.609, p<.01). There were no significant changes in method of contraception used. Percentage of students (G9-G12) reporting sexual activity 1994: N=1594, n=1004, 63% 1995: N=1661, n=1013, 61% 1996: N=1581, n=848, 54% 1997: N=2043, n=960, 47% Estimated pregnancy rates for girls aged 14-17 decreased from 62.9 (1991-1993) to 55.6 (1994-1996) but not significantly. The EPR was significantly greater (p<.05) in the comparison counties and all Kansas. Estimated pregnancy rates 1991-1993; 1994-1996 (/1000 14-17 yr olds) Intervention: 62.9; 55.6 Control: 60.3; 69.2 Kansas State comparison: 34.1; 37.9

Study details	Intervention and population details	Analyses	Results
Paine-Andrews et al (1999) CBA - **Objective:** To analyse the effects of a comprehensive multi-component school and community intervention on estimated pregnancy rates and birth rates **Setting:** School + community **Country:** USA **Funding source:** Kansas Health Foundation	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= Cross-sectional **Intervention**, n= **Comparator**, n= **Male** n (%) = **Mean age (range)**: NR **Ethnicity**: NR **Other baseline:** **Intervention details** **Name**: NR **Focus/aim**: Reduce teenage pregnancies, delay the age of first intercourse, and to increase contraceptive use **Programme type**: Multi-component **Theoretical base**: theory of change **Key components**: Enhanced sexuality education for teachers and parents; comprehensive, age-appropriate sexuality education from K-12; increased access to health services; collaboration with school administrators; use of mass media; increased awareness and involvement of the entire community in teenage pregnancy prevention, peer support and education; alternative activities for young people; and involvement of the faith community. **Providers/delivers**: Other **Length, duration**, i**ntensity**: 5 years **Other details**: **Comparator**: Selected counties or zip codes that had similar estimated pregnancy or birth rates	**Process details** **Data collection method(s)**: Other Questionnaires for behaviour change data, state health department for pregnancy and birth rates **Statistical method(s) used to analyse data**: Pearson chi-squared **Unit of allocation:** NR **Unit of analysis:** Individual **Time to follow-up**: Not clear **Other details:** **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: NR **Attrition** **Number of participants completing study**: Cross-sectional **Reasons for non-completion**: NA	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Estimated pregnancy rates decreased among females aged 14-17 in both communities, but compared to the comparison communities, this finding was not significant. In Geary County, reports of ever having had sex decreased significantly among males and females in 9th and 10th grades between 1994 and 1997 (males: 43.3% vs. 63.2%; females: 38.4% vs. 50.6%; both p<0.05). In Franklin County, there was no significant change. In Franklin County, more males in the upper grades reported using condoms in 1996 than in 1994 (55% vs. 39%, p=0.031). No other changes in condom use were statistically significant in the two communities. No change in age at first intercourse.

Study details	Intervention and population details	Analyses	Results
Somers et al (2001) CBA - **Objective:** Evaluation of the effectiveness of a computerized infant simulator used as a teen pregnancy prevention program. **Setting:** School + other Home **Country:** USA **Funding source:** NR	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 100 **Intervention**, n= 84 (84) **Comparator**, n= 16 (16) **Male** n (%) = 20 (20) **Mean age (range)**: 17.13; 16.4 **Ethnicity**: Predominantly Middle Eastern **Other baseline:** **Intervention details** **Name**: Baby Think It Over Computerised baby simulation **Focus/aim**: To provide a realistic experience of the responsibility and burden involved with having an infant **Programme type**: Skills training **Theoretical base**: NR **Key components**: N/A **Providers/delivers**: N/A **Length, duration**, **intensity**: Had baby for 48 hours **Other details**: **Comparator**: No intervention	**Process details** **Data collection method(s)**: Questonnaire/Survey **Statistical method(s) used to analyse data**: MANCOVA **Unit of allocation:** Individual **Unit of analysis:** Individual **Time to follow-up**: 6-10 weeks **Other details:** **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**: NR	**Knowledge and understanding** No significant change in any outcomes **Attitudes and values** No significant change in any outcomes **Personal and social skills** **Health and social outcomes related to alcohol and sexual health**

Study details	Intervention and population details	Analyses	Results
Somers (2006) NRCT - **Objective:** To evaluate a pregnancy prevention intervention (Baby Think It Over) **Setting:** School **Country:** USA **Funding source:** NR	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 230 **Intervention**, n= 133 (58%) **Comparator**, n= 117 (42%) **Male** n (%) = 25% **Mean age (range)**: Intervention - 15.8 years; control 16.6 years **Ethnicity**: NR **Other baseline:** **Intervention details** **Name**: Baby Think It Over **Focus/aim**: To provide experience of parenting to reduce pregnancies **Programme type**: Pregnancy prevention **Theoretical base**: cognitive development **Key components**: baby simulator **Providers/delivers**: Other **Length, duration**, i**ntensity**: acted as parents for 2 nights and 3 days **Other details**: **Comparator**: did not use the simulators	**Process details** **Data collection method(s)**: Questonnaire/Survey **Statistical method(s) used to analyse data**: MANCOVA **Unit of allocation:** Group: classes **Unit of analysis:** Group **Time to follow-up**: Immediate, 10-12 weeks after pre-test **Other details:** **Baseline comparability** **Groups balanced at baseline:** **Comments**: Intervention group 5% males; control group 43% males. Control group were almost one year older. **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**: NR	**Knowledge and understanding** **Attitudes and values** Mean scores (MS, SD) Control; Intervention, post-test pre-marital sex attitudes: 5.66, 2.21; 5.57, 2.11 Future orientation: 19.19, 1.35; 18.81, 1.85 Realism about child rearing: 14.26, 4.73; 14.45, 5.58 Personal Intentions regarding sex and child bearing: 13.23, 1.75; 12.62, 2.38 Self-efficacy to resist risky situations: 8.09, 3.45; 7.99, 3.27 Perception of others' acceptance of teen pregnancy: 15.98, 3.53; 14.89, 3.37 **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** Mean scores (MS, SD) Control; Intervention Frequency of engagement in sexual behaviour: 9.89, 4.07; 9.73, 4.39

Study details	Intervention and population details	Analyses	Results
Stout et al (1996) CBA - **Objective:** Evaluation and follow up of School based health centres (SBHC) **Setting:** School **Country:** USA **Funding source:** Oregan state	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1870; 778; 1651 **Intervention**, n= 739 (39.5); 354 (45.5); 1126 (74.3) **Comparator**, n= 1131; 424; 525 **Male** n (%) = NR **Mean age (range)**: NR **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: SBHC **Focus/aim**: NR **Programme type**: Health promotion clinics **Theoretical base**: NR **Key components**: NR **Providers/delivers**: Other **Length, duration**, i**ntensity**: 16-40 hrs/week **Other details**: **Comparator**: No intervention	**Process details** **Data collection method(s)**: Questonnaire/Survey **Statistical method(s) used to analyse data**: Logistic regression analysis - Change score **Unit of allocation:** School **Unit of analysis:** Individual **Time to follow-up**: 2 years **Other details:** **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: **Attrition** **Number of participants completing study**: NR **Reasons for non-completion**: NR	**Knowledge and understanding** **Attitudes and values** Site B - decrease in number favouring abstention ($p < 0.05$); increase in contraceptive use (p , 0.05) Site C - significant increase in number of students favouring abstention before marriage **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** Site A - Significant decrease in binge drinking ($p < 0.05$), last year cannabis use ($p < 0.05$); negative effect on contraceptive utilisation ($p < 0.05$) Site B – Significant increase in the number of students reporting use of a valid contraceptive at first intercourse ($p<0.05$) and a significant increase in the number of students initiating contraceptive use within six months of intercourse ($p<0.05$). Site C - significant increase in health service utilisation ($p < 0.05$), significant decrease in substance use ($p < 0.05$), significant decrease in sexual activity ($p < 0.05$)

Study details	Intervention and population details	Analyses	Results
Teitler (1997) CBA - **Objective:** evaluation of Health Resource Centres in schools providing reproductive health information, condoms and health referrals. **Setting:** School **Country:** USA **Funding source:** Robert Wood Johnson Foundation	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 945 at FU **Intervention**, n= 348 (37%) **Comparator**, n= 597 (63%) **Male** n (%) = 430 (46%) **Mean age (range)**: Mean Years: Intervention 15.9; Control 16.0 **Ethnicity**: 68% Black, 22% White (10% NR) **Other baseline:** NR **Intervention details** **Name**: NR **Focus/aim**: Condom availablity and health information for students at school **Programme type**: Condom availability **Theoretical base**: NR **Key components**: Drop-in centres providing information, condoms and health referrals **Providers/delivers**: External **Length, duration**, i**ntensity**: **Other details**: **Comparator**: Schools without HRCs	**Process details** **Data collection method(s)**: One on one interviews **Statistical method(s) used to analyse data**: differences in percentages **Unit of allocation:** School **Unit of analysis:** Organisation/institution **Time to follow-up**: NA **Other details:** **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: differences reported in ethnicity **Attrition** **Number of participants completing study**: NA - no pre-tests **Reasons for non-completion**: NA	**Knowledge and understanding** **Attitudes and values** **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** No signifcant impact of the program on initiation of sex, sex in past month or condom use. Changes in percentages - Intervention; control: pre-test, post-test Ever had sex: 64.0, 55.7; 57.6, 58.8 Had sex in last four weeks: 32.0, 24.0; 28.6, 25.6 Used condom at last intercourse: 52.2, 61.9; 58.0, 64.6 Had sex without condom in last four weeks: 7.5, 4.8; 5.6, 5.4

Study details	Intervention and population details	Analyses	Results
Vincent et al (2004) CBA - **Objective:** to compare 20 years of pregnancy rates among girls aged 14-17 years who were exposed to interventions to reduce the occurrence of unintended pregnancies in Bamberg County, South Carolina **Setting:** School + community **Country:** USA **Funding source:** Various but the South Carolina Department of Social Services "has provided the bulk of the funding"	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= NR **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = 0 (female pregnancy only assessed) **Mean age (range)**: 14-17 years **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: NR **Focus/aim**: to reduce over time the occurrence of unintended pregnancies among never married teens and preteens **Programme type**: abstinence and contraception promotion **Theoretical base**: NR **Key components**: integrated school and community program **Providers/delivers**: External **Length, duration**, **intensity**: K-12 **Other details**: **Comparator**: three non-intervention counties	**Process details** **Data collection method(s)**: Other Estimated pregnancy rates **Statistical method(s) used to analyse data**: **Unit of allocation:** Area: counties in South Carolina **Unit of analysis:** Community/environment **Time to follow-up**: NA **Other details:** data of all pregnancies from Office of Vital Records and Public Health Statistics for 14-17 year old girls **Baseline comparability** **Groups balanced at baseline:** NR **Comments**: NR **Attrition** **Number of participants completing study**: NA **Reasons for non-completion**: NA	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** There was a general downturn in teen pregnancy rates from 1981-2000. The intervention county started higher and ended lower than the other study couties suggesting that the intervention in Bamberg had a positive effect in reducing the rate of teen pregnancies. Estimated Pregnancy Rates/1000 females: Intervention; Control 1; Control 2: Control 3 1981: 55.8; 51.8; 42.9; 34.6 1985: 36.6; 60.2; 53.7; 54.9 1989: 53.3; 69.0; 48.4; 52.7 1995: 41.8; 43.5; 48.4; 45.5 2000: 24.6; 37.5; 35.0; 30.6

SRE and alcohol education: General health education programmes

Study details	Intervention and population details	Analyses	Results
Bond et al (2004) RCT (Cluster) ++ **Objective:** To determine the effect of a multilevel school based intervention on adolescents' emotional well-being and health risk behaviours. **Setting:** School, **Country:** Australia **Funding source:** Queen's Trust for Young Australians	**Intervention details** **Name**: Gatehouse Project **Focus/aim**: To improve emotional wellbeing and reduce health risk behaviours **Programme type**: Multi-component **Theoretical base**: NR **Key components**: (1) Establishment and support of a school-based health team who addressed risk and protective factors in the school's social and learning environment; and (2) Curriculum delivered in year 8 focussing on dealing with difficult or conflicting emotional responses. Year 9 curriculum was designed to provide opportunities to explore and practice key strategies for managing difficult emotions. **Providers/delivers**: Teachers and other staff members **Length**: NR **Duration**: NR **Intensity**: 10 weeks (40 hours) **Other details**: School liaison teams provided professional development and ongoing support for the schools during implementation of the programme. **Comparator**: Control - no intervention **Population details** **Inclusion**: NR **Exclusion**: NR. **Total** n= 2,678 (26 schools) **Intervention**, n= 1,335 (12 schools) **Comparator**, n= 1,343 (14 schools) **Male:** intervention n = 629 (47.1%); control n = 623 (46.4%) **Mean age (range)**: 13-14 years	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Univariate and multivariate logistical regressions **Unit of allocation:** Organisation/ institution (26 schools) **Unit of analysis:** Organisation/ institution **Time to follow-up**: End of year 8 (Wave 2), end of year 9 (Wave 3) and year 10 (Wave 4). **Other details:** All analyses were conducted using the intention to treat principle. **Baseline comparability** **Groups balanced at baseline**: No **Comments**: Intervention group reported slightly lower levels of risk factors. **Attrition** **Number of participants completing study**: Loss of 10% by third wave. **Reasons for non-completion**: NR	**Knowledge and understanding** **Attitudes and values** There was no significant difference between students who received the intervention and control students on any of the measures examining social relationships, school attachment or depressive symptoms, at any follow-up. **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** There was no significant difference between students who received the intervention and control students on any of the measures of alcohol use, at any follow-up. Any drinking %, OR (95% CI) (intervention; control) Wave 2: n= 1081; 39.4; 44.0 OR 0.83 (0.63 to 1.09); adj OR 0.93 (0.71 to 1.21) Wave 3: n= 1227; 50.3; 53.6 OR 0.88 (0.65 to 1.19); adj OR 1.00 (0.78 to 1.28) Wave 4: n= 1619; 66.3; 70.2 OR 0.83 (0.55 to 1.28); adj OR 0.96 (0.69 to 1.33) Regular drinker %, OR (95% CI) (intervention; control) Wave 2: n= 253; 9.4; 10 OR 0.93 (0.59 to 1.47); adj OR 1.09 (0.77 to 1.57)

	Ethnicity: NR **Baseline drinking behaviours**: Drinker: 397 (29.7%), control 432 (32.2%) and total 829 (31%) Regular drinker: 62 (4.6%), control 75 (5.6%) and total 137 (5.1%) Binged: 167 (12.5%), control 174 (13%) and total 341 (12.7%).		Wave 3: n= 192; 7.5; 8.1 OR 0.92 (0.56 to 1.49); adj OR 1.05 (0.70 to 1.57) Wave 3: n= 106; 4.5; 4.4 OR 1.02 (0.62 to 1.68); adj OR 1.13 (0.77 to 1.66) Binge drinking %, OR (95% CI) (intervention; control) Wave 2: n= 478; 17.4; 19.3 OR 0.88 (0.63 to 1.23); adj OR 0.95 (0.69 to 1.32) Wave 3: n= 582; 22.7; 24.4 OR 0.91 (0.64 to 1.30); adj OR 0.99 (0.70 to 1.38) Wave 4: n= 815; 33.3; 34.6 OR 0.94 (0.63 to 1.39); adj OR 1.02 (0.71 to 1.46)

Study details	Intervention and population details	Analyses	Results
Flay et al (2004) RCT (Cluster) ++ **Objective:** Evaluation of the effects of a social development curriculum and health promotion curriculum in inner city African American Youth. Aban Aya **Setting:** School + community **Country:** USA **Funding source:** NICHHD, NIDA	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= mean of 644 at each wave **Intervention**, n= 204 SDC; 185 SCI **Comparator**, n= 184 **Male** n (%) = 49.5% **Mean age (range)**: Grade 5 at start of intervention **Ethnicity**: 100% African American **Other baseline:** 47% two parent households; 77% free school lunches **Intervention details** **Name**: Aban Aya **Focus/aim**: Strengthen community ties, enhance self and cultural growth **Programme type**: Social development curriculum (SDC); school/community intervention (SCI) **Theoretical base**: Variety of behavioural change theories **Key components**: Building cognitive behavioural skills; SCI = SDC + parental support, community development, school climate **Providers/delivers**: External **Length, duration**, i**ntensity**: 3 years, 16-21 lessons/year **Other details**: **Comparator**: Health Enhancement Curriculum (HEC)	**Process details** **Data collection method(s)**: Questonnaire/Survey **Statistical method(s) used to analyse data**: Hierarchical modelling, controlled for clustering **Unit of allocation:** School **Unit of analysis:** Individual **Time to follow-up**: End of each school year for 3 years **Other details:** **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: **Attrition** **Number of participants completing study**: 93.2%; 89.5%; 92.7%. 51% of original sample **Reasons for non-completion**: Absenteeism, opt out	**Knowledge and understanding** **Attitudes and values** **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** In boys: Significant reduction in violence, SCI vs HEC ($p < 0.05$); Provoking Behaviours SCI vs HEC ($p < 0.05$); School delinquency SCI vs HEC ($p < 0.01$), SCI-SDC ($p < 0.05$); Recent sexual intercourse SCI vs HEC ($p < 0.05$); Condom use SCI vs HEC ($p < 0.05$) No significant programme effects for girls

Study details	Intervention and population details	Analyses	Results
Harrington et al (2001) RCT (Individual) + **Objective:** Evaluation of All Stars programme **Setting:** School **Country:** USA **Funding source:** NR	**<u>Population details</u>** **Inclusion**: NR **Exclusion**: NR **Total** n= 1655 **Intervention**, n= 629 specialist; 287 teacher **Comparator**, n= 739 **Male** n (%) = 45% **Mean age (range)**: Mode 12 **Ethnicity**: 69% White; 25% African American **Other baseline: NR** **<u>Intervention details</u>** **Name**: All stars **Focus/aim**: **Programme type**: Substance use, sexual behaviour and violence prevention **Theoretical base**: Social learning theory **Key components**: Normative behaviours, maintaining commitments, school attachment **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: 1 year **Other details**: **Comparator**: NR	**<u>Process details</u>** **Data collection method(s)**: Questonnaire/Survey **Statistical method(s) used to analyse data**: Anova, hierarchical linear modelling **Unit of allocation:** School **Unit of analysis:** Individual **Time to follow-up**: post-intervention, +1 year **Other details:** **<u>Baseline comparability</u>** **Groups balanced at baseline:** Yes **Comments**: **<u>Attrition</u>** **Number of participants completing study**: 1655 83.4%; 72.3% **Reasons for non-completion**: NR	**Knowledge and understanding** **Attitudes and values** **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** No significant differnces in increase in sexual activity. Small but significant differences in increase in substance use in specialist condition vs teacher or control ($p < 0.05$)

Study details	Intervention and population details	Analyses	Results
McNeal et al (2004) RCT (Individual) + **Objective:** Effectiveness of All Stars Programme **Setting:** **Country:** USA **Funding source:**	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 2289 **Intervention**, n= NR **Comparator**, n= NR **Male** n (%) = 46% **Mean age (range)**: 98% 11-13 years **Ethnicity**: 69% White, 23.3% African American **Other baseline:** **Intervention details** **Name**: All Stars **Focus/aim**: Prevent onset of targeted behaviours **Programme type**: Substance, sex and violence prevention **Theoretical base**: Social learning theory **Key components**: Lessons, discussion **Providers/delivers**: Teachers **Length, duration**, i**ntensity**: 22 sessions, 4 classroom, 4 peer discus 4 1-2-1 **Other details**: **Comparator**: Health Education as normal	**Process details** **Data collection method(s)**: Questonnaire/Survey **Statistical method(s) used to analyse data**: HLM **Unit of allocation:** School **Unit of analysis:** Individual **Time to follow-up**: +1 year **Other details:** **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: **Attrition** **Number of participants completing study**: 1822 (79.6%) **Reasons for non-completion**: NR	**Knowledge and understanding** **Attitudes and values** **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** At post intervention: Slower rate of growth of last month cannabis use in specialist led group vs controls ($p > 0.05$). Teacher led group showed slower rate of growth of tobacco use than other conditions At + 1 year follow up: Main effect teacher condition vs control on rate of growth of alcohol ($p < 0.05$), cigarettes ($p < 0.05$), inhalants ($p < 0.05$)

Study details	Intervention and population details	Analyses	Results
Moberg and Piper (1990) CBA + **Objective:** Evaluation of Project Model Health **Setting:** School, **Country:** USA **Funding source:** Maternal and child health division of US Dept Health and Human Services; NIDA	**Intervention details** **Name**: Project Model Health **Focus/aim**: Range of health outcomes including reduction in drink driving **Programme type**: Social learning theory **Theoretical base**: **Key components**: Health curriculum **Providers/delivers**: Not clear **Length**: 64 sessions **Duration**: 0.5 hrs **Intensity**: Daily throughout a semester **Other details**: Instructors received 80 hours of training **Comparator**: **Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 197 (pre-test and follow-up data) (n=265 at pre-test) **Intervention**, n= 115 (58.4) **Comparator**, n= 82 (41.6) **Male**: intervention 40%; control 51.2% **Mean age (range)**: 12-14 years **Ethnicity**: NR **Baseline drinking behaviours**: 44.6% used alcohol in previous month; 32.1% of control, NS	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: ANOVA **Unit of allocation:** N/A **Unit of analysis:** Individual **Time to follow-up**: 1 year **Other details:** **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: **Attrition** **Number of participants completing study**: n= 197 (74%) **Reasons for non-completion**: Matching pre-test and follow-up data not available	**Knowledge and understanding** **Attitudes and values** No difference in self-esteem. **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** Used alcohol in last month (% PMH pre, follow up; comparison) 44.6, 59.8; 32.1, 63.0, NS Frequency of alcohol in last month (mean (SD) PMH pre, follow up; comparison) 0.004 (0.133), 0.130(0.263); 0.043(0.108), 0.195(0.310), NS

Study details	Intervention and population details	Analyses	Results
O'Donnell (1999; 2004) RCT (Cluster) + **Objective:** to reduce sexual risk behaviours in a curriculum and community placement program **Setting:** School + community **Country:** USA **Funding source:** National Institute for Child Health and Human Development; National Institute for Nursing Research	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= 1157 **Intervention**, n= 477 at follow up **Comparator**, n= 584 at follow up **Male** n (%) = NR **Mean age (range)**: 12.2 7th grade, 13.3 8th grade **Ethnicity**: At follow up: 79.2% non-Hispanic black, 15.9% Hispanic, 4.9% other **Other baseline:** NR **Intervention details** **Name**: Reach for Health Community Youth Service Program **Focus/aim**: drug and alcohol use, violence and sexual behaviours that can result in HIV infection, other STDs and unintended pregnancy **Programme type**: focus on risky sexual behaviours **Theoretical base**: NR **Key components**: Classroom curriculum and assignment to 2 community placement (e.g. nursing home, health clinic, child day care centre, senior citizen centre) **Providers/delivers**: Teachers **Length, duration**, **intensity**: 40 lessons over 1 years **Other details**: **Comparator**: received standard health education	**Process details** **Data collection method(s)**: Questionnaire/Survey **Statistical method(s) used to analyse data**: percentages **Unit of allocation:** Group: classrooms **Unit of analysis:** Group **Time to follow-up**: fall-spring approx 6 months; 2 years **Other details:** **Baseline comparability** **Groups balanced at baseline:** **Comments**: not detailed **Attrition** **Number of participants completing study**: 195 (17%) 2 years (including no control) **Reasons for non-completion**: "had been discharged from the study sites" for first FU	**Knowledge and understanding** **Attitudes and values** **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** There were higher increases in risk behaviours in the control group than in either intervention group for all outcomes. Differences were greater in eighth graders and special education students. Control; curriculum; CYS + curriculum: percentage (delta) Ever had sex: 40.7 (+8.2); 37.7 (+3.4); 32.2 (+4.4) Past 3 month sex: 28.2 (+5.3); 29.1 (+3.4); 20.6 (-.4) Past 3 month sex without condom: 37.7 (+3.0); 35.6 (-12.7); 26.7 (-15.9) Past 3 month sex without birth control: 46.1 (+9.0); 53.6 (-5.0), 40.5 (-8.4) Individual level statistics suggested positive effects for participants in the CYS program with only 13% participants who had no sexual experience at baseline reporting having had sex by follow up, compared to 17.3% curriculum only and 21.2% control participants. Students in the CYS program were significantly less likely to report recent intercourse at follow up than the control students (p<.05) and scored significantly lower on the Sex Behaviour Index (p<.03). Sex in past 3 months: Effect estimate = -.538, SE=.262, p<.05 Sexual risk behaviour index at 3 months: effect estimate=-.512, SE=.223, p<.05 At 2 year FU, a higher proportion of the curriculum only sample had ever had sex or had sex in the past month than those who had 1 or 2 years of CYS. Percentages at baseline and 2 year follow up (delta), curriculum only; 1 year

			CYS; 2 year CYS Ever had sex: 27.1, 67.8 (+40.7); 19.2, 575.7 (+38.5); 17.9, 51.2 (+31.3) Recent sex: 20.3, 66.1 (+45.8); 15.4, 50.0 (+34.6); 13.1, 40.1 (+27.0) Those in the curriculum only condition were more likely to have initiated sex by spring 10th grade than those who participated in CYS for 2 years (OR=.32 (.25, .99)) or 1 year (OR=.49 (.25, .99)). They were also more likely to report sex in the past month than the 2 year CYS students (OR=.39 (.20, .76)) and the 1 year CYS students (OR=.48 (.24, .96).

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Patton et al (2006) RCT (Cluster) + **Objective:** To test the efficacy of an intervention designed to promote social inclusion and commitment to education **Setting:** School **Country:** Australia **Funding source:** NR	**Population details** **Inclusion**: NR **Exclusion**: NR **Total** n= '97 2546; '99 2586; '01 2463 **Intervention**, n= '97 1343; '99 1158; '01 966 **Comparator**, n= '97 1203; '99 1428; '01 1497 **Male** n (%) = ~46% **Mean age (range)**: 13-14 years **Ethnicity**: NR **Other baseline:** NR **Intervention details** **Name**: Gatehouse Project **Focus/aim**: To promote social inclusion **Programme type**: Social inclusion **Theoretical base**: NR **Key components**: Feedback from a student survey about security, coordinating action team with a focus on school policies and professional practice of teachers, consultation and training regarding specific intervention strategies, and an 8th grade curriculum element that focused on problem-solving (10 weeks). **Providers/delivers**: Other **Length, duration**, i**ntensity**: 2 years **Other details**: **Comparator**: NR	**Process details** **Data collection method(s)**: Questonnaire/Survey **Statistical method(s) used to analyse data**: Logistic and ordinal multiple regression models **Unit of allocation:** School **Unit of analysis:** Organisation/institution **Time to follow-up**: Three cross-sectional surveys conducted at 2-year intervals **Other details:** NR **Baseline comparability** **Groups balanced at baseline:** Yes **Comments**: **Attrition** **Number of participants completing study**: 11 intervention schools and 14 control schools **Reasons for non-completion**: One school in the intervention group failed to provide complete behavioral outcome data	**Knowledge and understanding** NR **Attitudes and values** NR **Personal and social skills** NR **Health and social outcomes related to alcohol and sexual health** Early initiation of sexual intercourse Adjusted estimate OR (95% CI) 1997: 1.10 (0.68,1.8) 1999: 0.84 (0.59,1.2) 2001: 0.55(0.37,0.83)

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Piper et al (2000) RCT (cluster) -* **Objective:** To assess the Healthy for Life (HFL) programme when taught as an intensive, one semester effort, compared to teaching it as a four week segment each year over three years **Setting:** School **Country:** USA **Funding source:** National Institute on Drug Abuse, Robert Wood Johnson Foundation *Design revised to allow schools to select intervention allocation (Intensive or Age Appropriate).	**Intervention details** **Name**: The Healthy for Life programme **Focus/aim**: General health behaviours including alcohol, tobacco and cannabis use **Programme type**: social inoculation, normative education, health advocacy, and media influences. **Theoretical base**: Social influences model **Key components**: Two versions of the program: (1) curriculum delivered in one sequential twelve-week block (Intensive) and (2) curriculum delivered in three four-week segments (Age Appropriate). Additional components were a peer component (election of peer leaders), a family component (parent orientation session, home mailings; and parent/adult Interviews as "homework assignments") and a community component. **Providers/delivers**: Teachers and peer leaders **Length**: (1) 54-lesson curriculum in Grade 7; (2) 20 lessons in Grade 6, 19 lessons in Grade 7 and 19 lessons in Grade 8. **Duration**: (1) 15 months; (2) everyday for 4 weeks every year **Intensity**: see Key components **Other details**: Community programme ran for 15 months at the Intensive sites or for six months every three years at the Age Appropriate sites. **Comparator**: Standard health education **Population details** **Inclusion**: Sixth grade students **Exclusion**: **Total** n= 2,483 students (21 schools) **Intervention**: Intensive, n = 758; Age Appropriate, n = 827 **Comparator**, n = 898 **Male** n (%) = 48% **Mean age (range)**: NR **Ethnicity**: Overall: 96% White. Control 94%, Age Appropriate 94% and intensive 92% white. **Baseline drinking behaviours**: NR	**Process details** **Data collection method(s)**: Questionnaire/Survey (self-report) **Statistical method(s) used to analyse data**: Multilevel regression model **Unit of allocation:** Organisation/ institution (22 schools) **Unit of analysis:** Individual and School **Time to follow-up**: Yearly from Grade 6 to Grade 10. **Other details:** One of the seven schools selected to be part of the Intensive condition dropped out of the study before the intervention was implemented. Data from this school (n=59 students) were excluded from all analyses. **Baseline comparability** **Groups balanced at baseline**: Yes **Comments**: Authors state that group were equivalent on alcohol use. Data NR. **Attrition** **Number of participants completing study**: n=1,981 (79.8%) provided data in Grade 6 and Grade 9. The 10th grade response rate was 68%. **Reasons for non-completion**: later start date due to finances, less cooperation with high schools and political concerns over survey. 10th grade survey under-represented students in the Intensive condition.	**Knowledge and understanding** **Attitudes and values** **Personal and social skills** **Health and social outcomes related to alcohol and sexual health** Past month alcohol use (Grade 6; Grade 9; Grade 10) Control: 8%; 28%; 41% Age appropriate: 9%; 33%; 48% Intensive: 9%; 33%; 45% Alcohol use in past month – coefficients (SE) (9th grade; 10th grade) Age appropriate condition 0.34 (0.19); 0.30 (0.14)* Intensive condition: 0.20 (0.09)*; 0.27 (0.10)* *p<0.05 There were a significant negative treatment effects on past month alcohol use for both the Age Appropriate and Intensive conditions in the 9th and 10th grades. That is, students receiving either intervention condition reported greater past month alcohol use than controls in the 9th and 10th grades. Students in the Age Appropriate condition reported significantly higher rates of intercourse in the past month in 9th grade than those in the control condition. This difference was not significant in 10th grade. The Intensive condition had no effect on rates of intercourse.