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Drinking, smoking, and illicit drug use among 15 and 16 year olds in the United Kingdom

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Abstract

Objective—To examine patterns of self reported drinking, smoking, and illicit drug use among a representative United Kingdom sample of people born in 1979.

Design—Cross sectional, single phase survey based on a stratified cluster sample of 70 United Kingdom secondary schools during March and April 1995. Pupils completed a 406 item standardised questionnaire under examination conditions.

Setting—United Kingdom state and private secondary schools.

Subjects—7722 pupils aged 15 and 16.

Main outcome measures—Reported use of alcohol, tobacco, and illicit drugs.

Results—Almost all the pupils had drunk alcohol, 36% (2772/7689) had smoked cigarettes in the past 30 days, and 42.3% (3264/7722) had at some time used illicit drugs, mainly cannabis. 43% (1546/3546) of boys and 38% (1529/4009) of girls had tried cannabis. Higher levels of smoking were associated with poorer school performance (20.4% (783/3840) with average performance *v* 44.1% (214/486) with below average performance, $F = 79.06$, $P < 0.01$). Levels of drug use in 15 and 16 year olds in 1995 were higher in Scotland than in England, Wales, or Northern Ireland.

Conclusions—Drug experimentation was high among 15 and 16 year olds, and use of cannabis was particularly high among smokers. Cigarette smoking was more common among girls than boys.

Introduction

The use of licit and illicit psychoactive drugs by young people has long been of scientific, political, and public concern. Recent evidence suggests that illicit drug use has been increasing steadily in the United Kingdom and many other countries and that a substantial minority of adolescents drink heavily and smoke tobacco.^{1,2} National surveys of drinking and smoking have rarely been conducted simultaneously, and no United Kingdom wide survey of young people's drinking, smoking, and drug use has been carried out. An international study has been initiated by the Pompidou Group to examine and compare these behaviours in 15 and 16 year olds in 26 European countries. This paper reports the initial results of the United Kingdom part of that study.

Subjects and methods

We studied individuals born in 1979 from 70 schools. The sample was chosen to be representative of Great Britain and Northern Ireland as a whole, to reflect different geographical regions within Great Britain and Northern Ireland, to represent both state and independent schools, and to allow analysis of urban and rural areas.

We divided the country into 13 regions based on local authority divisions: one each for Northern Ireland and Wales, two for Scotland, and nine for England. The regions chosen were comparable both in population size and in numbers of schools, except that London and the home counties was roughly three times larger than average and northern Scotland was about one quarter the size. We then selected 60 state schools, with a random sample being separately chosen from each region. London and the home counties was deliberately under-sampled and northern Scotland oversampled. The sampling ratios varied from nine schools out of 952 for London and the home counties to four schools out of 90 for northern Scotland. In Northern Ireland we selected one Roman Catholic intermediate, one Roman Catholic grammar, one Protestant intermediate, and one Protestant grammar school. All 13 regions contained urban and rural areas and random sampling ensured that schools from both were chosen in each region.

Finally, we selected a sample of 10 independent schools. This gave nearly the correct proportion of state to independent schools (4088 to 758 in Britain). Six independent schools were randomly selected from the nine English regions and one each from Wales, northern Scotland, southern Scotland, and Northern Ireland. All eligible students in each school were approached, yielding a stratified, single stage cluster sample. For this report the nine English regions and the two in Scotland were combined and the results from independent schools were not analysed separately. The data were weighted according to the formula, $\text{weight} = \text{constant/probability of school selection}$. Two sets of weights were used with differing constants. The first set was applied to the United Kingdom as a whole and the second was used in the comparisons of the four areas within the United Kingdom. This ensured that the numbers added to the totals in the samples being analysed. Thirty seven of the schools originally chosen refused to participate, mainly on the ground that they had been over-researched. Each of these was replaced by the next school on the list. A large city school in Wales dropped out (because the local organiser was ill) too late for replacement.

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Table 1—Alcohol and tobacco use in 15 and 16 year olds. Values are percentages (weighted numbers; 95% confidence intervals) unless stated otherwise

	England	Northern Ireland	Scotland	Wales	All regions
Girls	n = 2969	n = 328	n = 661	n = 166	n = 4092
Alcohol:					
Ever consumed	94.1 (2598/2762; 91.6 to 96.6)	85.0 (263/309; 81.3 to 88.7)	95.9 (599/625; 93.3 to 98.5)	100.0 (161)	94.1 (3596/3822; 92.0 to 96.2)
Ever intoxicated	79.1 (2255/2849; 75.6 to 82.6)	62.1 (197/317; 55.6 to 68.8)	79.7 (507/636; 74.5 to 84.9)	80.5 (132/164; 70.8 to 90.2)	78.5 (3088/3933; 75.5 to 81.5)
>9 Drinking occasions in past 30 days	11.6 (325/2795; 10.0 to 13.2)	2.8 (9/316; 0.0 to 5.5)	7.8 (49/623; 6.1 to 9.5)	20.4 (33/161; 4.5 to 36.3)	11.0 (426/3860; 9.6 to 12.4)
≥5 Drinks in a row in past 30 days	49.8 (1470/2949; 46.6 to 53.0)	39.5 (128/325; 34.3 to 44.7)	47.5 (312/656; 40.9 to 54.1)	61.6 (103/166; 49.1 to 74.1)	49.5 (2010/4064; 46.7 to 52.3)
Mean intake on last drinking occasion (U)	6.5 (n = 2462; 6.1 to 6.9)	6.7 (n = 249; 6.0 to 7.4)	7.1 (n = 577; 6.1 to 8.1)	6.5 (n = 157; 5.6 to 7.4)	6.6 (n = 3418; 6.3 to 6.9)
Tobacco:					
Ever smoked	72.1 (2135/2961; 69.9 to 74.3)	62.6 (203/324; 57.9 to 67.3)	70.4 (464/659; 65.1 to 75.7)	71.6 (118/165; 61.7 to 81.5)	71.5 (2915/4078; 69.5 to 73.5)
Smoked in past 30 days	40.3 (1192/2955; 38.0 to 42.6)	31.0 (102/328; 24.0 to 38.0)	38.2 (252/659; 33.3 to 43.1)	37.4 (62/165; 22.0 to 52.8)	39.6 (1613/4075; 37.5 to 41.7)
≥11 Cigarettes/day in past 30 days	7.0 (208/2955; 5.8 to 8.2)	1.8 (6/328; 0 to 3.7)	6.2 (41/659; 3.3 to 9.1)	2.8 (5/166; 0 to 6.7)	6.6 (267/4075; 5.5 to 7.7)
Boys	n = 2712	n = 202	n = 548	n = 136	n = 3630
Alcohol:					
Ever consumed	93.9 (2381/2535; 91.3 to 96.5)	94.3 (178/189; 91.5 to 97.1)	96.8 (496/512; 94.6 to 99.0)	98.3 (128/130; 95.5 to 100)	94.4 (3205/3395; 92.2 to 96.6)
Ever intoxicated	76.5 (1995/2610; 73.2 to 79.8)	78.4 (150/191; 75.0 to 81.8)	80.5 (419/520; 77.3 to 83.7)	86.6 (116/134; 73.1 to 100)	77.3 (2695/3488; 74.5 to 80.1)
>9 Drinking occasions in past 30 days	16.4 (419/2563; 14.6 to 18.2)	9.6 (18/187; 4.7 to 14.5)	9.6 (49/512; 4.7 to 14.5)	17.2 (23/131; 0.0 to 36.7)	15.4 (526/3425; 13.6 to 17.2)
≥5 Drinks in a row in past 30 days	50.6 (1364/2697; 46.5 to 54.7)	53.0 (105/198; 49.1 to 56.9)	52.0 (281/540; 46.8 to 57.2)	63.0 (85/135; 48.1 to 77.9)	51.2 (1844/3604; 47.8 to 54.6)
Mean intake on last drinking occasion (U)	8.5 (n = 2150; 7.9 to 9.1)	9.7 (n = 170; 8.2 to 11.2)	8.7 (n = 467; 8.2 to 9.2)	10.9 (n = 123; 9.0 to 12.8)	8.7 (n = 2920; 8.2 to 9.2)
Tobacco:					
Ever smoked	63.5 (1715/2702; 60.9 to 66.1)	60.0 (121/202; 51.0 to 69.0)	62.8 (344/548; 55.5 to 70.1)	63.3 (86/136; 60.8 to 65.8)	63.3 (2290/3619; 60.9 to 65.7)
Smoked in past 30 days	32.8 (885/2698; 30.0 to 35.6)	29.1 (58/200; 26.5 to 31.7)	27.1 (149/548; 19.5 to 34.7)	34.2 (46/135; 31.2 to 37.2)	32.1 (1159/3614; 29.4 to 34.8)
≥11 Cigarettes/day in past 30 days	5.5 (147/2698; 4.6 to 6.4)	5.7 (11/201; 2.7 to 8.7)	5.8 (32/548; 3.4 to 8.2)	4.2 (6/136; 0.0 to 9.6)	5.5 (197/3614; 4.7 to 6.3)

Numbers in the four separate areas do not add up to the total for all regions and there are also small rounding anomalies because of the weighting system used.

The survey was conducted during March and April 1995. Each student completed a standardised questionnaire in school under exam conditions. When possible all eligible students within a school were tested at the same time. The British version of the instrument took roughly 40 minutes to complete and included 406 items. The core part of the questionnaire was used in all the other countries and was based on that originally used in a previous study of six European countries,³ modified by agreement of all the researchers concerned. The results presented here are based exclusively on this core part. The instrument contains demographic data on the respondents' age, sex, living group, and level of parental education.

We estimated mean values, confidence intervals, and significance using the Pccarp package from the University of Iowa.⁴ This provides weighted means and allows for clustering within schools. The program provides a test of proportionality for two way tables analogous to χ^2 . The test statistic is distributed approximately as F , but the degrees of freedom for F are largely non-intuitive.

Results

Within the 69 cooperating schools 9126 pupils were eligible for study. In all, 7722 (84.6%) pupils completed the questionnaire, 1004 (11%) were absent ill or with permission, and 207 (2.3%) were absent without permission or for other reasons. Parental consent to participation was refused for 121 (1.3%) and 72 (0.8%) did not complete the questionnaire satisfactorily.

Internal consistency checks suggested acceptable reliability and validity—for example, inconsistent responding to two versions of the same question was never more than 7.5%; the average number of unanswered questions

was 2.7%; inconsistent response patterns for lifetime, 12 month, and 30 day use of various drugs were never more than 2.7%; and only 0.3% (20/7564) of respondents claimed to use a fictitious drug, "relewin." All 7722 respondents were aged 15 or 16; 3630 (47%) were boys and 4092 (53%) were girls. Response rates on the variables described below were greater than 96% except for "ever having consumed alcohol" and "intake on the last drinking occasion," where the rates were 93.5% and 88.6% respectively. However, only 0.8% of respondents answered none of the questions on alcohol and the missing values on alcohol consumption seem likely to stem from indecision on which response category to choose. Most of the missing data on alcohol intake were due to insufficient detail for coding the answers.

Level of parental education was higher in the Welsh sample than in the others (either parent more than secondary education, Wales 62% (187/302), England 50% (2840/5681), Northern Ireland 49% (260/530), and Scotland 46% (556/1209); $F = 3.19$, $df = 3, 53$, $P < 0.05$). This result may be because of the loss of one urban Welsh school.

ALCOHOL CONSUMPTION

Table 1 shows the results for alcohol consumption. On combining boys and girls, 5.8% (416/7217) reported never having consumed alcohol, many of these attributing this to religious beliefs. Most (77.9%, 5783/7421) reported having at some time experienced intoxication; 50.3% (3854/7668) had consumed five or more drinks in a row during the past 30 days and 48.3% (3482/7202) had been intoxicated during the same period. A drink was defined as a half pint (285 ml) of normal strength beer, cider, lager, or stout; a single glass of wine; or a single public bar measure of spirits.

Table 2—Percentages (weighted numbers; 95% confidence intervals) of 15 and 16 year olds who reported ever using illicit drugs

	England	Northern Ireland	Scotland	Wales	All regions
Girls	n = 2969	n = 328	n = 661	n = 166	n = 4092
Cannabis	38.0 (1102/2899; 34.8 to 41.2)	15.9 (52/325; 14.2 to 17.5)	47.4 (310/655; 45.8 to 49.0)	31.4 (52/166; 9.0 to 53.8)	38.0 (1525/4009; 35.1 to 40.9)
Any illicit drug	39.6 (1175/2969; 36.7 to 42.5)	18.4 (60/328; 12.5 to 24.3)	50.1 (331/661; 46.7 to 53.5)	32.1 (53/166; 10.3 to 53.9)	39.8 (1628/4092; 37.1 to 42.5)
Any drug by injection	0.6 (18/2884; 0.2 to 1.0)	0.4 (1/323; 0.0 to 0.9)	0.7 (4/654; 0.4 to 1.0)	0.7 (1/161; 0.0 to 2.0)	0.6 (25/3987; 0.2 to 1.0)
Glues and solvents	20.7 (605/2916; 18.2 to 23.2)	25.6 (83/325; 21.5 to 29.7)	21.7 (143/660; 17.2 to 26.2)	19.1 (32/167; 16.4 to 21.8)	21.0 (847/4031; 18.9 to 23.1)
LSD/other hallucinogens	11.6 (336/2906; 9.8 to 13.4)	6.3 (20/325; 1.4 to 11.2)	18.1 (119/655; 9.3 to 26.9)	11.7 (19/165; 2.5 to 20.9)	12.2 (489/4017; 10.2 to 14.2)
Amphetamines	11.4 (332/2906; 10.0 to 12.8)	2.9 (9/324; 1.0 to 4.8)	21.2 (139/655; 13.3 to 29.1)	10.0 (16/164; 4.5 to 15.5)	12.3 (493/4015; 10.5 to 14.1)
"Pills" combined with alcohol	25.5 (742/2910; 22.8 to 28.2)	15.9 (52/325; 12.2 to 19.6)	27.1 (177/653; 18.8 to 35.4)	24.9 (41/164; 14.7 to 35.1)	25.3 (1014/4016; 22.9 to 27.7)
Ecstasy (MDMA)	7.0 (202/2892; 5.6 to 8.4)	4.8 (16/324; 1.5 to 8.1)	10.6 (69/655; 4.1 to 17.1)	5.5 (9/163; 1.5 to 9.5)	7.3 (293/3999; 5.9 to 8.7)
Tranquillisers/sedatives	8.7 (253/2903; 7.4 to 10.0)	8.9 (29/325; 5.2 to 12.6)	14.8 (96/651; 4.9 to 24.7)	7.3 (12/164; 5.0 to 9.6)	9.5 (380/4010; 7.9 to 11.1)
Cocaine	2.4 (70/2906; 1.8 to 3.0)	1.0 (3/325; 0.2 to 1.8)	2.3 (15/655; 0.5 to 4.1)	3.1 (5/164; 1.4 to 4.8)	2.4 (95/4016; 1.9 to 2.9)
Crack	2.3 (65/2903; 1.7 to 2.9)	0.4 (1/324; 0.0 to 0.9)	2.4 (15/655; 0.7 to 4.1)	3.4 (6/165; 0.2 to 6.6)	2.2 (89/4013; 1.7 to 2.7)
Steroids	0.9 (25/2884; 0.6 to 1.2)	0.4 (1/323; 0.0 to 0.9)	2.3 (15/654; 0.3 to 4.3)	0.0 (0/161)	1.0 (40/3987; 0.6 to 1.4)
Heroin	1.6 (48/2902; 1.0 to 2.2)	0.1 (0/324; 0.0 to 0.4)	1.6 (10/653; 0.2 to 3.0)	0.0 (0/163)	1.5 (61/4007; 1.0 to 2.0)
"Relevin" (dummy drug)	0.4 (11/2897; 0.1 to 0.7)	0.0 (0/325)	0.0 (0/655)	0.0 (0/163)	0.3 (12/4004; 0.1 to 0.5)
Boys	n = 2712	n = 202	n = 548	n = 136	n = 2620
Cannabis	41.9 (1112/2652; 39.1 to 44.7)	34.9 (69/198; 24.0 to 45.8)	59.8 (317/530; 52.7 to 66.9)	34.5 (46/137; 1.7 to 67.3)	43.6 (1546/3546; 41.0 to 46.2)
Any illicit drug	43.5 (1181/2712; 40.8 to 46.2)	37.8 (76/202; 27.4 to 48.2)	59.9 (328/548; 53.2 to 66.6)	35.0 (47/135; 4.0 to 66.0)	45.0 (1636/3630; 42.6 to 47.4)
Any drug by injection	0.7 (19/2659; 0.3 to 1.0)	0.2 (0/198; 0.0 to 0.5)	1.1 (6/531; 0.0 to 2.3)	0.0 (0/134)	0.7 (26/3555; 0.4 to 1.0)
Glues and solvents	19.1 (512/2683; 16.7 to 21.5)	28.0 (55/197; 26.4 to 29.6)	22.6 (121/538; 18.5 to 26.7)	15.8 (21/135; 5.7 to 25.9)	19.7 (705/3587; 17.6 to 21.8)
LSD/other hallucinogens	15.9 (425/2670; 13.3 to 18.5)	18.8 (38/201; 13.0 to 24.6)	24.3 (130/536; 17.9 to 30.7)	14.2 (19/135; 4.7 to 23.7)	17.0 (606/3574; 14.6 to 19.4)
Amphetamines	13.6 (361/2663; 11.4 to 15.8)	10.4 (21/199; 7.8 to 13.0)	22.6 (121/537; 19.5 to 25.7)	11.7 (16/136; 0.0 to 23.6)	14.5 (517/3566; 12.5 to 16.5)
"Pills" combined with alcohol	13.5 (360/2666; 11.7 to 15.3)	12.8 (25/199; 8.9 to 16.7)	17.5 (94/535; 14.6 to 20.4)	15.0 (20/135; 0.0 to 32.7)	14.0 (499/3567; 12.4 to 15.6)
Ecstasy (MDMA)	8.5 (225/2656; 7.2 to 9.8)	10.7 (21/198; 8.5 to 12.9)	14.0 (75/534; 11.1 to 16.9)	7.5 (10/135; 0.0 to 18.6)	9.2 (326/3555; 8.1 to 10.3)
Tranquillisers/sedatives	5.6 (149/2657; 4.7 to 6.5)	5.0 (10/198; 2.4 to 7.6)	16.4 (87/532; 12.1 to 20.7)	5.0 (7/136; 0.6 to 9.4)	6.9 (244/3556; 5.8 to 8.0)
Cocaine	2.8 (75/2669; 2.2 to 3.4)	3.1 (6/198; 1.3 to 4.9)	2.3 (12/535; 1.0 to 3.6)	5.0 (7/136; 0.0 to 12.5)	2.8 (101/3571; 2.2 to 3.4)
Crack	2.9 (77/2667; 2.2 to 3.6)	2.4 (5/199; 0.6 to 4.2)	2.3 (12/535; 1.0 to 3.6)	0.8 (1/135; 0.0 to 2.6)	2.7 (98/3569; 2.1 to 3.3)
Steroids	2.3 (61/2650; 1.5 to 3.1)	1.0 (2/198; 0.1 to 1.9)	2.0 (10/531; 0.7 to 3.3)	3.3 (5/136; 1.3 to 5.3)	2.2 (80/3546; 1.5 to 2.9)
Heroin	1.7 (45/2665; 1.1 to 2.3)	1.4 (3/199; 0.5 to 2.3)	2.5 (13/535; 0.8 to 4.2)	0.8 (1/135; 0.0 to 2.5)	1.7 (62/3566; 1.2 to 2.2)
"Relevin" (dummy drug)	0.2 (4/2659; 0.1 to 0.3)	0.7 (1/198; 0.0 to 1.8)	0.5 (3/536; 0.0 to 1.3)	0.0 (0/136)	0.2 (8/3560; 0.1 to 0.3)

Numbers in the four separate areas do not add up to the total for all regions and there are also small rounding anomalies because of the weighting system used.

TOBACCO AND ILLICIT DRUGS

Overall, 67.6% (5205/7697) of those surveyed indicated that they had at some time smoked cigarettes. Just over a third of the sample, 36% (2772/7689), had smoked in the past 30 days. A total of 40.6% (3071/7555) indicated that they had at some time used cannabis (table 2). This had reportedly been used on 40 or more occasions by 10.3% (778/7555). Glues and solvents had been used by 20.4% (1552/7618), lysergide (LSD) by 14.4% (1095/7591), and amphetamines by 13.3% (1010/7581). Few respondents reported having used drugs such as cocaine and heroin, but 7.3% (293/3999) of girls and 9.2% of boys (326/3555) had used ecstasy (3,4-methylenedioxymethamphetamine, MDMA).

We found a strong relation between cigarette smoking and use of cannabis. Only 6.9% (142/2492) of non-smokers had ever tried cannabis. This percentage rose with the level of smoking to 89.2% (387/434) in

respondents who had smoked more than 10 cigarettes a day in the past 30 days. The overall correlation between level of smoking and level of cannabis use (both measured in seven categories) was 0.62 ($P < 0.01$).

EFFECT OF SEX

Several sex differences were apparent. Boys were more likely than girls to have used an illicit drug ($F = 10.95$, $df = 1, 53$, $P < 0.01$), to have smoked cannabis ($F = 10.26$, $P < 0.01$), and to have used LSD ($F = 21.75$, $P < 0.01$). Girls, on the other hand, had higher rates of tranquilliser use ($F = 10.43$, $P < 0.01$), cigarette smoking ($F = 37.27$, $P < 0.01$), and use of pills combined with alcohol ($F = 99.85$, $P < 0.01$). Levels of alcohol consumption on the last occasion were significantly higher among boys than girls ($t = 8.69$, $P < 0.01$). Boys had first tried beer, wine, spirits, and cannabis at an earlier age than girls ($P < 0.05$ for all).

Key messages

- The study describes the United Kingdom part of a European wide survey of alcohol, drugs, and cigarette smoking in 15 and 16 year olds in 1995
- More than 40% had tried illicit drugs at some time, mainly cannabis. This represents a sharp increase over the past five years
- Just over one third of the sample had smoked cigarettes in the previous 30 days and cigarette smoking was higher among girls than boys
- Higher levels of drug use were associated with poorer school performance
- Levels of illicit drug use tended to be higher in Scotland than in England, Wales, or Northern Ireland

There were no significant differences in the ages of first misuse of glues and solvents.

REGIONAL VARIATIONS

Scottish teenagers were the highest users of cannabis (boys: $F = 3.50$, $df = 2,47$, $P < 0.05$; girls: $F = 3.14$, $df = 3,51$, $P < 0.05$) and all illicit drugs (boys: $F = 3.41$, $P < 0.05$; girls: $F = 3.50$, $P < 0.05$). Scottish boys used tranquillisers more than other boys ($F = 7.47$, $P < 0.01$). Northern Irish girls seemed to drink less than other girls but the differences were not significant. The findings were unchanged when level of parental education was controlled for.

SCHOOL PERFORMANCE

There were clear relations between school performance and both licit and illicit drug use. For example, among all students indicating that their performance was above average, only 20.4% (783/3840) reported having smoked on 40 or more occasions compared with 44.1% (214/486) of those reporting below average performance ($F = 79.06$, $df = 2,53$, $P < 0.01$). Similar differences were found for most forms of drug use for both sexes in all regions. The effects remained significant after controlling for level of parental education.

Discussion

This survey is one of the most detailed of its type to have been conducted in the United Kingdom and covers the whole country. However, various possible sources of bias need discussion. Firstly, sampling procedures might be inadequate. Although there is no evidence that the sampling of schools was biased, representation from Northern Ireland and Wales was low, especially after the loss of a Welsh school. Secondly, clustering of respondents within a relatively small number of schools might affect the outcome. However, the effects of clustering within schools were taken into account by Pccarp and, in many cases results that would have been significant with a χ^2 test were not significant.

Thirdly, absences on the day of testing might be important. In all, 84.6% of those eligible completed the questionnaires, and the 11% who were absent ill are not likely to have differed substantially from those who did respond. The 2.3% absent without permission may have been heavy drug users, and this might result in underestimation of drug use. We cannot comment on the reasons for refusal of parental consent, but this accounted for only a small number (1.3%). Finally, overreporting or underreporting of socially or legally proscribed behaviour may have occurred. At the coding stage all questionnaires were scrutinised according to principles agreed with the other European researchers and a small number (0.8%) which were blatantly frivolous were removed. There were several indications, not least the low rate of positive response to using the dummy drug "relevis," that underreporting and overreporting were not serious problems.

COMPARABILITY WITH OTHER STUDIES

Our results confirm existing evidence that most 15 and 16 year olds drink alcohol. However, as found by Loretto,⁵ there were substantial minorities of teenagers (especially girls) who did not drink in Northern Ireland. Many of the teenagers had used cannabis, or less commonly, other illicit or recreational drugs such as amphetamines, hallucinogens, glues, and solvents. The use of ecstasy was reported by 9.2% of boys and 7.3% of girls. This is high for a category A drug. In addition, 36% had smoked cigarettes in the past 30 days. Girls were more likely than boys to have smoked.

Comparing our findings with those of a large household survey of 16-19 year olds in England in 1990,⁶ a large school survey of English 9-15 year olds in 1989,⁷ and Goddard's report on teenage drinking in 1994⁸ suggests that there has been no dramatic change in use of alcohol by 15 and 16 year olds since 1989-90 but that overall frequency of drinking has increased. The regional results on more than nine drinking occasions in the past 30 days agree with Goddard's finding that English and Welsh 11-15 year olds were more likely than Scottish pupils to have had a drink during the previous week.⁸

Among girls, but not boys, cigarette smoking may have increased. However, for all types of drug experimentation there seems to have been a large rise since 1989. For instance, the Health Education Authority found rates of experimentation among 16 year old girls of 15% for cannabis, 2% for solvents and ecstasy, 1% for amphetamines, tranquillisers, and cocaine, and below 0.5% for heroin.⁶ It is hard to see how methodological differences could account for these increases. In our study, only one out of 50 English schools had a mean experimentation level for cannabis of below 15%. However, only 11.9% of girls and 18.8% of boys claimed to have used cannabis 20 or more times. These results seem to be broadly in line with other evidence.^{1 9-13}

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