

news from the international study

CONTROL OF ADOLESCENT SMOKING

Smoking and other health-related behaviours and health indicators in Scottish adolescents

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This report compares the health lifestyles of 15-year-old smokers and non-smokers in Scotland. The aim is to describe the overall patterning of adolescent health behaviour in relation to smoking so that a better understanding of smokers' lifestyles can be gained. The data were collected in 1998 from a sample of 1,724 fifteen-year-old Scottish secondary school students, as part of the EC-funded project, *Control of Adolescent Smoking (CAS)*.

- ~ Adolescent daily smokers were more likely than occasional smokers or non-smokers to hardly ever or never eat fresh fruit, or cooked vegetables. Daily smokers were also more likely to drink sugared fizzy drinks and eat chips at least once a day.
- ~ Smokers were significantly less likely than non-smokers to exercise frequently. In particular, boys who smoked were less likely than non-smoking boys to exercise four hours or more each week. There was no significant association between smoking status and frequency of exercise in girls.
- ~ Daily smokers, both boys and girls, were significantly more likely than non-smokers to have been drunk more than ten times. They were also more likely to have used cannabis three times or more.
- ~ Occasional smokers and daily smokers were significantly more likely than non-smokers to report frequent (at least once a week) minor health complaints.

Background

This report will compare the health lifestyles of 15-year-old smokers and non-smokers in Scotland. Data was gathered in 1998 under the auspices of the Scottish component of the *Health Behaviours in School-aged Children: WHO Cross-national Study (HBSC)*. The aim is to describe the overall patterning of adolescent behaviour in relation to smoking so that a better understanding of smokers' lifestyles can be gained. This information can be used to inform health education and health promotion activities, in particular smoking prevention and cessation programmes for adolescents.

Data will be presented which shows the relationships between smoking and diet, exercise and fitness and alcohol

and cannabis use. Associations between smoking and various minor health complaints such as headache, stomach-ache, feelings of depression and difficulties in getting to sleep will also be described.

Diet

Figure 1 shows that daily smokers were more likely than occasional smokers or non-smokers to hardly ever or never eat fresh fruit or cooked vegetables. For example, 18.2% of daily smokers reported hardly ever or never eating fresh fruit, compared to 11.4% and 14.1% of non-smokers and occasional smokers respectively. Nearly a third (30.5%) of daily smokers reported hardly ever or never eating cooked vegetables,

Figure 1: Association between adolescent smoking status and reports of “hardly ever or never” eating fresh fruit or cooked vegetables.

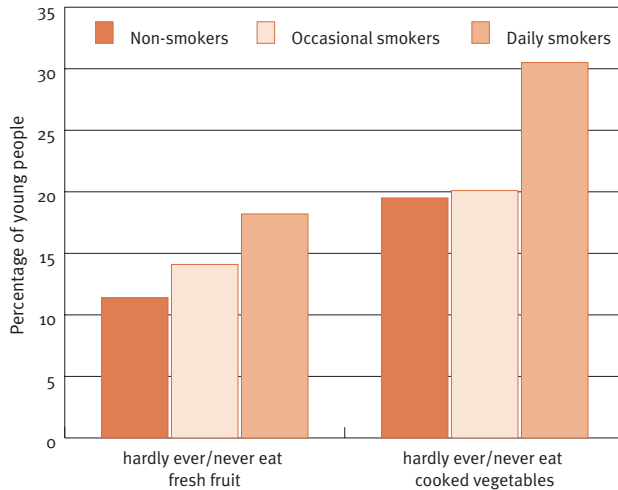
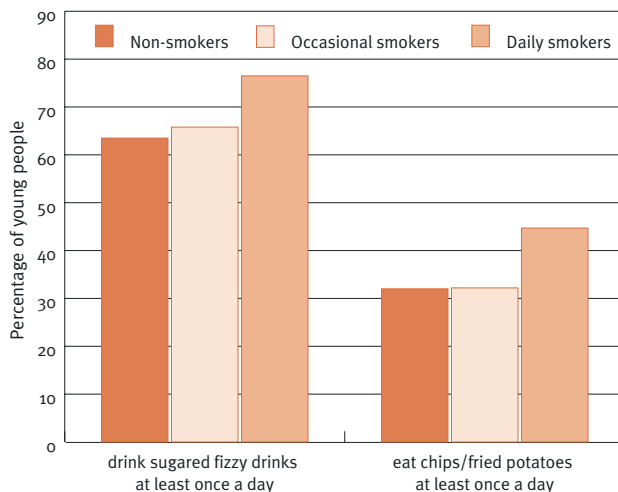


Figure 2: Association between adolescent smoking status and reports of drinking sugared fizzy drinks and eating chips (fried potatoes) at least once a day.



compared to only one-fifth of non-smokers and occasional smokers (19.5% and 20.1% respectively).

Figure 2 shows that daily smokers are also more likely than non-smokers or occasional smokers to drink sugared fizzy drinks and eat chips every day. Three-quarters (76.5%) of daily smokers said they drank fizzy drinks at least once a day, compared to 63.5% of non-smokers and 65.8% of occasional smokers. Forty-five per cent (44.7%) of daily smokers reported that they ate chips at least once a day, while only about one-third of non-smokers and occasional smokers said the same (32.0% of non-smokers and 32.2% of occasional smokers). There was some variation in this pattern for boys and girls separately, but in general, the data suggests that daily smokers are more likely than non-smokers or occasional smokers to eat food with a high fat or sugar content.

Physical exercise and fitness levels

Table 1 shows the relationship between adolescents' smoking status and the numbers of hours they reported exercising each week outside school. In general, smokers exercised significantly fewer hours each week than non-smokers ($p < 0.01$). One-third (32.3%) of non-smokers reported exercising four hours or more each week, while 27.0% of occasional smokers and 22.5% of daily smokers said the same. Although boys were more likely than girls to exercise frequently, boys who smoked daily were significantly less likely than their peers to exercise four hours or more each week ($p < 0.01$). For example, 45.6% of non-smoking boys said they exercised four hours or more in a week, whereas only 29.6% of smokers said the same. For girls, there was no significant association between smoking status and frequency of exercise.

Occasional and daily smokers, both boys and girls, were also more likely than non-smokers to think of themselves as not very fit or very unfit.

Alcohol and cannabis use

There were significant associations between smoking status and alcohol and cannabis use in Scottish 15-year-olds ($p < 0.001$). Table 2 shows that daily smokers, both boys and girls, were more likely than non-smokers or occasional smokers to have been drunk more than ten times. Only 10.0% of non-smokers reported having been drunk more than 10 times. However, one-quarter (24.8%) of occasional smokers and 44.3% of daily smokers said the same.

Similarly, only 10.1% of non-smokers reported that they had used cannabis three times or more, while one-third (32.2%) of occasional smokers and nearly three-quarters (73.0%) of daily smokers said the same. While these percentages varied slightly for boys and girls, the general pattern was the same.

Table 1: Association between adolescent smoking status and hours of exercise (outside school hours) each week

Hours per week of exercise (outside school hours)	M (%)			F (%)			Total (%)		
	Non-smokers	Occ. smokers	Daily smokers	Non-smokers	Occ. smokers	Daily smokers	Non-smokers	Occ. smokers	Daily smokers
4 hours or more	45.6	43.6	29.6	19.0	17.2	17.5	32.3	27.0	22.5
2-3 hours	29.5	23.6	32.2	33.7	36.6	31.8	31.6	31.8	32.0
an hour or less	24.9	32.7	38.2	47.3	46.2	50.7	36.1	41.2	45.5
Total (n)	(594)	(55)	(152)	(596)	(93)	(217)	(1190)	(148)	(369)
Significance (p)		**			n.s.			**	

** – $p < 0.01$.**Table 2: Associations between adolescent smoking status and drinking, and between smoking status and cannabis use**

Have you ever had so much alcohol that you were really drunk?	M (%)			F (%)			Total (%)		
	Non-smokers	Occ. smokers	Daily smokers	Non-smokers	Occ. smokers	Daily smokers	Non-smokers	Occ. smokers	Daily smokers
No, never	35.3	8.9	7.7	40.2	3.2	4.5	37.8	5.4	5.9
Yes, once	20.8	12.5	11.6	19.7	12.9	10.0	20.3	12.8	10.7
Yes, several times	31.9	41.1	38.1	32.1	66.7	40.0	32.0	57.0	39.2
Yes, more than 10 times	11.9	37.5	42.6	8.0	17.2	45.5	10.0	24.8	44.3
Total (n)	(595)	(56)	(155)	(599)	(93)	(220)	(1194)	(149)	(375)
Significance (p)		***			***			***	
Have you ever used cannabis?									
Never	70.5	26.8	9.1	80.5	39.8	12.7	75.5	34.9	11.2
Once or twice	15.8	23.2	13.6	12.9	38.7	17.3	14.3	32.9	15.8
Three times or more	13.7	50.0	77.3	6.6	21.5	70.0	10.1	32.2	73.0
Total (n)	(590)	(56)	(154)	(595)	(93)	(220)	(1185)	(149)	(374)
Significance (p)		***			***			***	

*** – $p < 0.001$.

Minor health complaints and symptoms

Table 3 compares percentages of non-smokers, occasional smokers and daily smokers who reported having certain minor health complaints. Occasional and daily smokers were significantly more likely than non-smokers to report frequent symptoms of headache, stomach-ache, feeling low or depressed, irritability, having difficulties getting to sleep, and feeling dizzy ($p < 0.001$ in all cases). For example, while one-third (34.3%) of non-smokers complained of having a headache at least once week, 42.9% of occasional smokers and 45.8% of daily smokers had the same complaint. Smokers were also less likely than non-smokers to report having these symptoms “hardly ever” or “never”. Percentages varied for boys and girls, but in general, the pattern remained the same, except in the

case of girls’ reports of symptoms of headache; there was no statistically significant association between smoking status and frequency of headaches in girls.

Table 3: Association between adolescent smoking status and reported minor health complaints

In the last six months, how often have you had the following:	M (%)			F (%)			Total (%)		
	Non-smokers	Occ. smokers	Daily smokers	Non-smokers	Occ. smokers	Daily smokers	Non-smokers	Occ. smokers	Daily smokers
headache									
At least once a week	23.1	29.1	34.6	45.3	51.1	53.6	34.3	42.9	45.8
About every month	30.0	30.9	29.4	30.7	31.5	25.9	30.3	31.3	27.3
Hardly ever or never	46.9	40.0	35.9	24.0	17.4	20.5	35.4	25.9	26.8
Total (n)	(597)	(55)	(153)	(600)	(92)	(220)	(1197)	(147)	(373)
Significance (p)		*			n.s.			***	
stomach-ache									
At least once a week	10.2	16.4	20.3	23.5	30.4	42.3	16.9	25.2	33.2
About every month	25.3	29.1	22.2	55.1	54.3	45.0	40.3	44.9	35.7
Hardly ever or never	64.4	54.5	57.5	21.5	15.2	12.7	42.9	29.9	31.1
Total (n)	(596)	(55)	(153)	(601)	(92)	(220)	(1197)	(147)	(373)
Significance (p)		*			***			***	
feeling low or depressed									
At least once a week	11.1	9.1	20.3	25.0	36.6	32.3	18.0	26.4	27.3
About every month	15.3	14.5	17.6	31.6	37.6	33.2	23.5	29.1	26.8
Hardly ever or never	73.7	76.4	62.1	43.4	25.8	34.5	58.5	44.6	45.8
Total (n)	(596)	(55)	(153)	(601)	(93)	(220)	(1197)	(148)	(373)
Significance (p)		*			**			***	
difficulties in getting to sleep									
At least once a week	24.6	25.5	36.8	33.1	41.9	44.1	28.9	35.8	41.1
About every month	17.9	18.2	17.8	17.1	24.7	20.0	17.5	22.3	19.1
Hardly ever or never	57.5	56.4	45.4	49.8	33.3	35.9	53.6	41.9	39.8
Total (n)	(597)	(55)	(152)	(601)	(93)	(220)	(1198)	(148)	(372)
Significance (p)		*			***			***	

* – $p < 0.05$; ** – $p < 0.01$; *** – $p < 0.001$.

Credits

This report is taken from a larger report entitled, *Control of Adolescent Smoking in Scotland*. The full report is available from CAHRU at the address shown at right.

This study was funded by EC BIOMED II grant BMH4-CT98-3721, *Transnational variation in prevalence of adolescent smoking: the role of national tobacco policies and the school and family environments*. Short title: *Control of Adolescent Smoking (CAS)*. Participating countries/regions included Austria, French-speaking Belgium, Denmark, Finland, the German state of North Rhine-Westphalia, Norway, Scotland and Wales. The study was co-ordinated by the Scottish team, Candace Currie and Dawn Griesbach, at the University of Edinburgh. Data collection in Scotland was funded by the Health Education Board for Scotland (HEBS) under the auspices of the Scottish

component of the Health Behaviour in School-aged Children: WHO Cross-National Study (HBSC). The opinions expressed in this report are those of the authors and not the funders.

Further information about the CAS study is available from the project co-ordinator:

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